



Injury In Vírginia 2000

A Report On Injury Related Deaths and Hospitalizations

Injury in Virginia

A Report on Injury-Related Deaths and Hospitalizations for the Calendar Year 2000

Prepared By

Refaat Hanna, MA.
Injury Epidemiologist,
Center for Injury and Violence Prevention

Hospital Discharge Data Information Virginia Health Information, Inc. (VHI)

Mortality Data
Virginia Center for Health Statistics

Graphic Design

Sharon S. Jones, Executive Secretary

For more information on this report or to obtain additional copies contact:

Center for Injury and Violence Prevention Virginia Department of Health 1500 E. Main St., Room 105 Richmond, Virginia 23219 Phone: 1 (800) 732-8333

Fax: (804) 786-0917

Available online at http://www.vahealth.org/civp



TABLE OF CONTENTS

I.	Executive Summary
	Injury Fatalities
	Injury Hospitalizations
II.	Introduction
	Rational for the Report
	Methods
	Limitations of the Data
III.	
	Trend in rates of Injury Deaths, Virginia 1991 to 2000
	Comparison between Death Rates in Virginia and USA, 1999
	Causes and Intents of Injury Deaths
	Causes and Intents of Injury Deaths by Age
	Causes and Intents of Injury Deaths by Gender
	Causes and Intents of Injury Deaths by Race
IV.	Injury Hospitalizations
	Causes and Intents of Injury Hospitalizations
	Causes and Intents of Injury Hospitalizations by Age
	Causes and Intents of Injury Hospitalizations by Gender
	Causes and Intents of Injury Hospitalizations by Race
V.	Hospital Charges and LOS for Injury-related
	Hospitalizations
	Charges and LOS by Cause and Intent
	Charges and LOS by Age
	Charges and LOS by Gender
	Charges and LOS by Race
VI.	Analysis of Specific Causes of Injury Deaths and
	Hospitalizations
	Cut/Pierce.
	Drowning/Submersion.
	Fall
	Firearm
	Motor Vehicle Traffic
	Poisoning
	Suffocation
	Homicide and Assault
	Suicide and Self-inflicted
VII.	
	. Conclusions.

I. EXECUTIVE SUMMARY

1- Injury Fatalities 2000

- Injuries caused 3,575 deaths in Virginia during the year 2000 and accounted for 6.5% of all deaths. The death rate due to injuries was 50.5/100,000.
- Injury deaths accounted for 78.2 % of all deaths among the age group 15 to 19 and 71.7 % of deaths among the age group 20 to 24.
- The leading causes of injury deaths were motor vehicle traffic (25.7 %), firearm (22.0%), poisoning (12.1 %) and falls (8.3 %).
- Suicide accounted for (21.5 %) of all injury deaths and was 76.2 % higher than homicide (12.2 %).
- Injury death rates for males (70.0/100,000) were more than twice the rates for females (31.8/100,000).
- Suicide rates for males (17.3/100,000) were more than three times the rates for females (4.7 per 100,000).
- Homicide rates for blacks (16.5/100,000) were more than five times higher than for whites (3.8/100,000).
- In 2000, 2354 deaths were due to unintentional death, 770 were due to suicide, and 437 were due to homicide.

2- Injury Hospitalizations 2000

- In 2000, there were 40,223 cases of hospitalizations due to injuries. The rate for injury hospitalizations was 568.2/100,000.
- The majority of injury hospitalizations were due to unintentional injuries (76%). Self-inflicted injuries accounted for (10%) of all injury hospitalizations.
- Falls were the leading cause of injury hospitalizations (41%). Hospitalizations due to poisoning and motor vehicle traffic were the second and third respectively.
- Males and females had almost the same hospitalization rates due to injuries.
- Males were more than twice as likely as females to be hospitalized due to assaults.
- Total hospital charges due to injuries were \$ 598,330,224.

- Total hospital charges due to fall injuries were the highest at \$216,259,415 and accounted for 40.7% of the total charges. The second highest charges were due to motor vehicle traffic (\$83,836,727), accounting for 11.6% of all charges.
- Senior citizens of age group 65 and above had the highest hospital charges due to injuries \$254,476,707, accounting for 39 % of the total charges for injuries.

II. INTRODUCTION

Injury is one of the most serious social, economic and medical problems of our time. It is the leading cause of death for the age group 1 to 44 in Virginia, with more children and adolescents dying of injuries than all other causes combined.

Injury does not only lead to premature death, but also lifelong disabilities caused by burns, falls, motor vehicle crashes, gunshot wounds, poisoning and near drowning. Injuries affect us all, the injured person, the family, the medical system needed for the injured persons who survive disabled and the general public who pay more each year for an overburdened emergency medical trauma system.

Since the 1960's, public health knowledge about the causes of injuries and measures to prevent them has greatly improved. Injury data serves as a foundation for promoting injury and violence prevention measures. Researchers have discovered injury patterns and have identified prevention strategies. Child safety seats and smoke alarms are good examples of injury reduction methods. These injury prevention measures have been identified as successful because of the improvement in the field of data collection and analysis. The data is used to evaluate the results of intervention efforts.

Rationale for the Report

This report presents injury-related deaths and hospitalizations that occurred in Virginia during the year 2000. Hospital discharge data reflects hospital discharges due to injuries, therefore this report does not include injuries that were treated in emergency rooms, urgent care centers, physicians' offices, at home or other injuries that did not require hospital admission.

Methods

This report was developed and produced by the Center for Injury and Violence Prevention, Virginia Department of Health. The Virginia Center for Health Statistics provided the injury mortality data included in this report. Virginia Health Information (VHI) provided injury hospitalization data. The rates are calculated using 2000 population estimates obtained from US Census Bureau and Virginia Health Statistics. National data in this report was obtained from the National Center for Injury Prevention and Control (NCIPC) at the Center for Disease Control and Prevention (CDC).

Coding of Injuries and Deaths.

As of January 1999, the United States shifted coding of injury deaths from the ICD-9 revision to the tenth revision of the International Classification of Diseases (ICD-10). For injury morbidity data (non-fatal injuries) ICD-9 is still used in this report. Injury hospitalizations included in this report were assigned cause of injury or poisoning within the ICD-9 code from E800 – E999. Injury deaths were assigned cause of injury deaths or poisoning within the ICD-10 from W 250-Y 361.

Limitation of the Data Set

- The coding of mortality data changed significantly in 1999 form ICD-9 to ICD-10, so we should be careful when comparing number of deaths and death rates from 1998 and before with data from 1999 and after.
- Although injury hospitalization data are good indicators for injuries in Virginia, they have their own limitations, which can be concluded as follows:
 - 1. Hospitalization data do not include injuries treated in emergency rooms, urgent care centers, physicians' offices, at schools, homes, or those injuries that did not require hospital admissions.
 - 2. The data represent hospital admissions and discharges and not persons; this may result in over reporting as some patients may be admitted several times in different occasions.
- Errors may have occurred in the physician's diagnosis, medical records coding, through data entry, or in the gathering of demographic information. Some hospitals may under report or over report their injury admissions.
- We should be aware that rates based on 20 fewer injury or deaths cases are considered statistically unreliable and to be regarded with cautions. It is recommended to gather at least 3-5 years to produced a larger numerator or number of injury or death cases.

III. INJURY DEATH ANALYSIS 2000

Rates of Injury Deaths 1991-2000

The injury death rate in Virginia has been variable during the period from 1991-2000. The highest injury death rate was in 1991 (56.8 per 100,000) and the lowest rate of 50.5 per 100,000 occurred in 2000 (Figure 1).

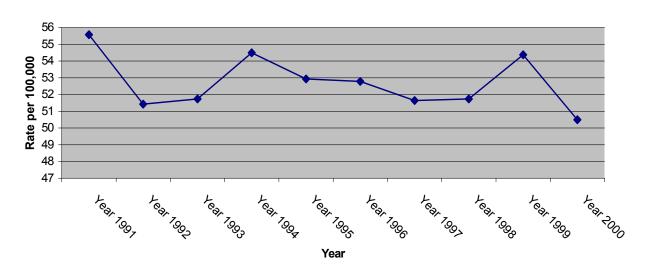


Figure 1: Trend in Injury Deaths, Virginia 1991-2000

Comparison between the Injury Death Rates in Virginia and the National Rates during Year 1999

The total injury death rate in Virginia in 1999 was 50.2/100,000, which is 7.7 % lower than the national rate of 54.4/100,000. Virginia had higher rates of suicide (11.8/100,000) and firearm injuries (11.8/100,000) and lower rate of motor vehicle traffic (11.9/100,000) and poisoning (6.0/100,000) than the national rates, (Figure 2).

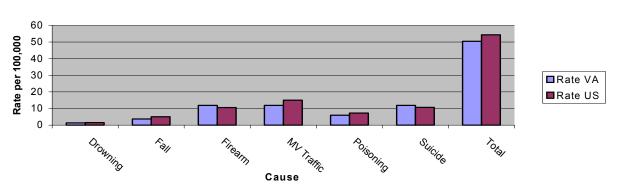


Figure 2: Injury Death Rates by Cause of Injury Deaths, Virginia and US., 1999

Injury Deaths as a Proportion of All Causes of Deaths

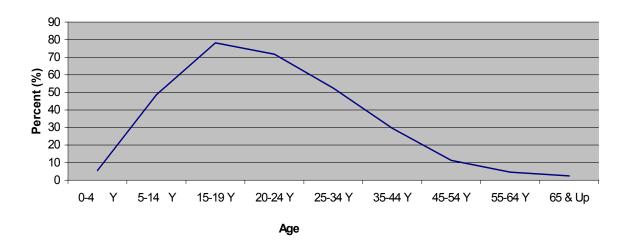
Total number of injury deaths in 2000 was 3,575 and that accounted for 6.4 % of all deaths (56,093). Injury deaths were responsible for 78.2 % of all deaths the for age group of 15 to 19 and 71.7% of all deaths for the age group of 20 to 24 (Table 1& Figure 3).

Table 1: Injury as a Proportion of all Causes of Deaths, Virginia 2000

Age Group	Frequency	Col (%)	Total Deaths	Injury Death (%)	Rate*
0-4 Y	71	2.0	791	8.9	15.4
5-14 Y	74	2.1	152	48.7	7.5
15-19 Y	254	7.1	325	78.2	52.5
20-24 Y	276	7.7	385	71.7	57.4
25-34 Y	501	14.0	957	52.4	48.3
35-44 Y	655	18.3	2212	29.6	54.6
45-54 Y	449	12.6	3989	11.3	44.9
55-64 Y	290	8.1	6223	4.7	45.9
65 & Up	1005	28.1	41059	2.4	126.8
Total	3575	100.0	56093	6.4	50.5

^{*}Rates are per 100,000 of the total population (7,078,515)

Figure 3: Injury Deaths as a Proportion of All Deaths by Age, Virginia 2000



Causes and Intents of Injury Deaths (Tables 2 & 3, Figures 4 & 5)

The leading causes of injury deaths in Virginia in 2000, were motor vehicle traffic (25.7 %,) firearm injuries (22.0 %) and poisoning (12.1 %). The majority of injury deaths were unintentional (65.8 %) followed by suicide 21.5 %. Suicide deaths were 76.2 % higher than homicide death.

Table 2: Causes of Injury Deaths, Virginia 2000

Causes	Frequency	Col (%)	Rate*
Cut pierce	77	2.2	1.1
Drowning Submersion	77	2.2	1.1
Fall	297	8.3	4.2
Fire Flame Burn	109	3.0	1.5
Hot Object Burn	7	0.2	0.1
Firearm	785	22.0	11.1
Machinery	25	0.7	0.4
Motor Vehicle Traffic	917	25.7	13.0
Pedal Cyclist Other	6	0.2	0.1
Pedestrian	16	0.4	0.2
Land Transport Other	55	1.5	0.8
Other Transport	23	0.6	0.3
Natural Environment	37	1.0	0.5
Overexertion	1	0.0	0.0
Poisoning	434	12.1	6.1
Struck By	27	0.8	0.4
Suffocation	294	8.2	4.2
Other causes	386	10.8	5.5
Total	3575	100.0	50.5

^{*}Rates are per 100,000 of the total population (7,078,515)

There are 2 Cases of Injury Deaths of Unknown Cause.

Table 3: Intent of Injury Deaths, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	2354	65.8	33.3
Suicide	770	21.5	10.9
Homicide	437	12.2	6.2
Legal Intervention	12	0.3	0.2
Total	3575	100	50.5

^{*}Rates are per 100,000 of the total population (7,078,515)

There are 2 Cases of Injury Deaths of Unknown Intent.

Figure 4: Leading Causes of Injury Deaths, Virginia 2000

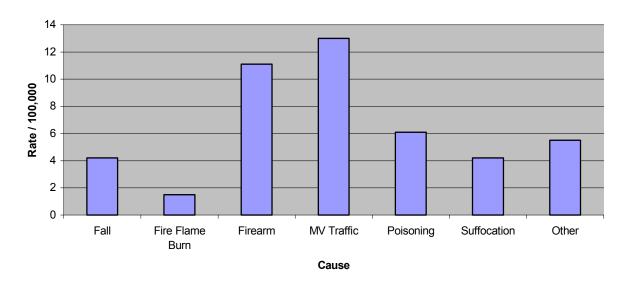
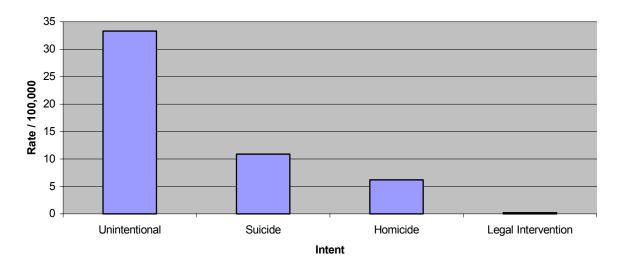


Figure 5: Intent of Injury Deaths, Virginia 2000



Causes and Intents of Injury Deaths by Age (Tables 4&5, Figures 6&7)

• Age 0 to 4

Fire flame burn and suffocation were the leading cause of injury deaths (19.7%) followed by motor vehicle traffic (15.5%). Seventy-five percent of all injury deaths were unintentional and 18% were due to homicide.

Age 5-14

Motor vehicle traffic was the leading cause of injury deaths (28.4%), followed by firearms (21.6%). The majority of injury deaths were unintentional (71.6%). Homicide was responsible for 20.3%, and suicide for 6.8%

• Age 15-19

Motor vehicle traffic remained as the leading cause of injury deaths and was responsible for 55.9 % of all injury deaths. Firearms were the second cause of injury deaths (21.7 %). Most of the injury deaths were due to unintentional injuries (68.1 %). Suicide accounted for 18.1 % and homicide for 13.4 %.

• Age 20-24

The rate of injury deaths due to motor vehicle traffic for this age group was higher than for previous age groups. Motor vehicle traffic accounted for 38.0 %, firearms were the second cause of injury deaths (21.8 %) and poisoning was the third cause of injury deaths (12.7 %). Unintentional injuries ranked first (61.6%) and the homicide rate in this age group was 73.1% higher than suicide.

• Age 25-34

Motor vehicle traffic remained the leading cause of injury deaths for this age group and was responsible for 33.3 % of all injury deaths. Firearms were the second cause of injury deaths (28.1 %) and poisoning was the third and accounted for 16.2 %. Unintentional injuries predominated and accounted for 56.3% of all injury deaths. Suicide was the second (22.0 %) and homicide (20.8 %)was the third leading intent of injury deaths.

• Age 35-44

Firearms and poisoning had the same percentage of injury deaths and were ranked as the first leading causes of injury deaths (26.6 %). Motor vehicle traffic ranked second and was responsible for 22.9 % of all injury deaths. Fifty-six percent of all injury deaths were unintentional. Suicide deaths remain the second (29.6 %) and homicide (14.2 %) the third leading intent of injury deaths.

• Age 45-54

Firearms were the leading cause of injury deaths (24.7%), motor vehicle traffic was the second (22.3%) and poisoning was the third (17.8 %). Unintentional injuries (59.9 %) were the leading intent of injury deaths, follow by suicide (31.0 %) then homicide (10.9 %).

• Age 55- 64

Firearm injuries remained the most common cause of injury deaths (24.8 %), followed by motor vehicle traffic (23.8 %). Most of the injury deaths in this age group were unintentional (63.8 %) and suicide accounted for 27.2% of injury deaths in this age group.

• Age 65 and above

Falls were the leading cause of injury deaths in this age group and accounted for 20.7 %. Motor vehicle traffic injuries accounted for 15.1%. Eighty-one percent of injury deaths were unintentional and suicide was responsible for 15.8 % of all injury deaths.

Table 4: Cause of Injury Deaths by Age Groups, Virginia 2000

Cause	0-4 Y	Col (%)	Rate*	5-14 Y	Col (%)	Rate*	15-19 Y	Col (%)	Rate*
Cut pierce	0	0.0	0.0	1	1.4	0.1	4	1.6	0.8
Drowning Submersion	7	9.9	1.5	11	14.9	1.1	6	2.4	1.2
Fall	2	2.8	0.4	1	1.4	0.1	5	2.0	1.0
Fire Flame Burn	14	19.7	3.0	6	8.1	0.6	3	1.2	0.6
Hot Object Burn	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Firearm	1	1.4	0.2	16	21.6	1.6	55	21.7	11.4
Machinery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Motor vehicle traffic	11	15.5	2.4	21	28.4	2.1	142	55.9	29.3
Pedal Cyclist Other	0	0.0	0.0	1	1.4	0.1	1	0.4	0.2
Pedestrian	2	2.8	0.4	1	1.4	0.1	1	0.4	0.2
Land Transport Other	0	0.0	0.0	3	4.1	0.3	5	2.0	1.0
Other Transport	0	0.0	0.0	0	0.0	0.0	1	0.4	0.2
Natural Environment	1	1.4	0.2	3	4.1	0.3	1	0.4	0.2
Overexertion	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Poisoning	0	0.0	0.0	2	2.7	0.2	9	3.5	1.9
Struck By	0	0.0	0.0	0	0.0	0.0	2	8.0	0.4
Suffocation	14	19.7	3.0	7	9.5	0.7	13	5.1	2.7
Other	19	26.8	4.1	0	0.0	0.0	6	2.4	1.2
Total	71	100.0	15.4	74	100.0	7.5	254	100.0	52.5

^{*}Rates are per 100,000 population

Cause	20-24 Y	Col (%)	Rate*	25-34 Y	Col (%)	Rate*	35-44 Y	Col (%)	Rate*
Cut pierce	9	3.3	1.9	11	2.2	1.1	16	2.4	1.3
Drowning Submersion	4	1.4	0.8	5	1.0	0.5	14	2.1	1.2
Fall	3	1.1	0.6	8	1.6	0.8	16	2.4	1.3
Fire Flame Burn	7	2.5	1.5	7	1.4	0.7	18	2.7	1.5
Hot Object Burn	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Firearm	76	27.5	15.8	141	28.1	13.6	174	26.6	14.5
Machinery	2	0.7	0.4	2	0.4	0.2	2	0.3	0.2
Motor vehicle traffic	105	38.0	21.8	167	33.3	16.1	150	22.9	12.5
Pedal Cyclist Other	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Pedestrian	1	0.4	0.2	3	0.6	0.3	1	0.2	0.1
Land Transport Other	12	4.3	2.5	4	0.8	0.4	13	2.0	1.1
Other Transport	1	0.4	0.2	9	1.8	0.9	7	1.1	0.6
Natural Environment	1	0.4	0.2	3	0.6	0.3	4	0.6	0.3
Overexertion	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Poisoning	35	12.7	7.3	81	16.2	7.8	174	26.6	14.5
Struck By	3	1.1	0.6	4	0.8	0.4	5	0.8	0.4
Suffocation	10	3.6	2.1	30	6.0	2.9	31	4.7	2.6
Other	7	2.5	1.5	25	5.0	2.4	30	4.6	2.5
Total	276	100.0	57.4	501	100.0	48.3	655	100.0	54.6

^{*}Rates are per 100,000 population

Table 4 Continued: Cause of Injury Deaths by Age Groups, Virginia 2000

Cause	45-54 Y	Col (%)	Rate*	55-64 Y	Col (%)	Rate*	65 & Up	Col (%)	Rate*
Cut pierce	13	2.9	0.3	8	2.8	1.3	15	1.5	1.9
Drowning Submersion	16	3.6	0.4	4	1.4	0.6	10	1.0	1.3
Fall	29	6.5	0.6	25	8.6	4.0	208	20.7	26.3
Fire Flame Burn	8	1.8	0.2	13	4.5	2.1	33	3.3	4.2
Hot Object Burn	0	0.0	0.0	1	0.3	0.2	6	0.6	0.8
Firearm	111	24.7	2.5	72	24.8	11.4	139	13.8	17.5
Machinery	3	0.7	0.1	6	2.1	0.9	10	1.0	1.3
MV Traffic	100	22.3	2.2	69	23.8	10.9	152	15.1	19.2
Pedal Cyclist Other	2	0.4	0.0	1	0.3	0.2	1	0.1	0.1
Pedestrian	2	0.4	0.0	2	0.7	0.3	3	0.3	0.4
Land Transport Other	4	0.9	0.1	3	1.0	0.5	11	1.1	1.4
Other Transport	3	0.7	0.1	0	0.0	0.0	2	0.2	0.3
Natural Environment	6	1.3	0.1	5	1.7	0.8	13	1.3	1.6
Overexertion	0	0.0	0.0	0	0.0	0.0	1	0.1	0.1
Poisoning	80	17.8	1.8	25	8.6	4.0	28	2.8	3.5
Struck By	8	1.8	0.2	3	1.0	0.5	2	0.2	0.3
Suffocation	34	7.6	0.8	24	8.3	3.8	131	13.0	16.5
Other	30	6.7	0.7	29	10.0	4.6	240	23.9	30.3
Total	449	100.0	10.0	290	100.0	45.9	1005	100.0	126.8

^{*}Rates are per 100,000 population

Table 5: Intent of Injury Death by Age Group, Virginia 2000.

Intent	0-4 Y	Col (%)	Rate*	5-14 Y	Col(%)	Rate*	15-19	Col (%)	Rate*
Unintentional	53	74.6	11.5	53	71.6	5.3	173	68.1	35.7
Suicide	0	0.0	0.0	5	6.8	0.5	46	18.1	9.5
Homicide	18	25.4	3.9	15	20.3	1.5	34	13.4	7.0
Legal Intervention	0	0.0	0.0	0	0.0	0.0	1	0.4	0.2
Total	71	100.0	15.4	74	100.0	7.5	254	100.0	52.5

^{*}Rates are per 100000 population

Intent	20-24 Y	Col (%)	Rate*	25-34 Y	Col (%)	Rate*	35-44 Y	Col (%)	Rate*
Unintentional	170	61.6	35.4	282	56.3	27.2	365	55.7	30.4
Suicide	38	13.8	7.9	110	22.0	10.6	194	29.6	16.2
Homicide	66	23.9	13.7	104	20.8	10.0	93	14.2	7.7
Legal Intervention	2	0.7	0.4	4	0.8	0.4	3	0.5	0.2
Total	276	100.0	57.4	501	100.0	48.3	655	100.0	54.6

^{*}Rates are per 100,000 population

Intent	45-54 Y	Col (%)	Rate*	55-64 Y	Col (%)	Rate*	65 & up	Col (%)	Rate*
Unintentional	260	57.9	26.0	185	63.8	29.3	813	80.9	102.6
Suicide	139	31.0	13.9	79	27.2	12.5	159	15.8	20.1
Homicide	49	10.9	4.9	25	8.6	4.0	33	3.3	4.2
Legal Intervention	1	0.2	0.1	1	0.3	0.2	0	0.0	0.0
Total	449	100.0	44.9	290	100.0	45.9	1005	100.0	126.8

^{*}Rates are per 100,000 population

There is 1 case of Injury death of Unknown Intent

Figure 6: Leading Causes of Injury Deaths by Age, Virginia 2000

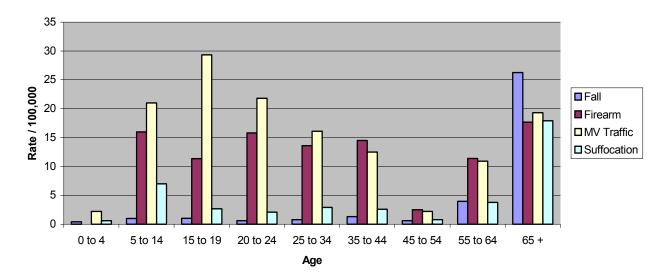
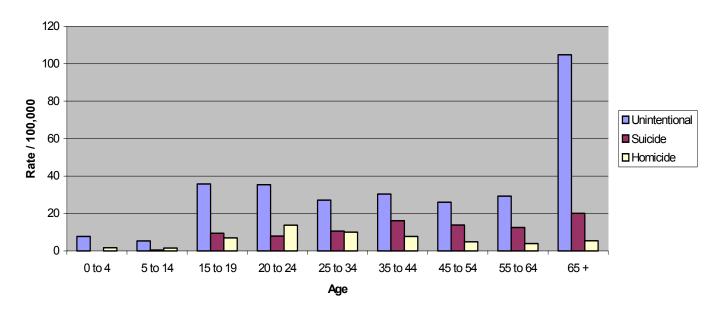


Figure 7: Intent of Injury Deaths by Age, Virginia 2000



Cause and Intent of Injury Deaths by Gender (Tables 6 & 7 and Figures 8 & 9)

Males

Firearms, motor vehicle traffic and poisoning were the three leading causes of injury deaths for males in 2000 and were responsible for 26.8 %, 25.8 % and 11.5 % of injury deaths respectively. Unintentional injuries were responsible for 62.0 % of all injury deaths, suicide was responsible for 24.7 % and homicide was responsible for 12.7 %.

Females

Motor vehicle traffic, falls and poisoning were the three leading causes of injury deaths for females and were responsible for 25.4 %, 14.0 % and 13.4 % respectively. Most injuries (74.0 %) were unintentional. Suicide accounted for 14.7 % of injury deaths and homicide accounted for 11.3 %.

Table 6: Causes of Injury Death by Gender, Virginia 2000

Cause	Male	Col (%)	Rate*	Female	Col (%)	Rate*
Cut pierce	49	2.0	1.4	28	2.4	0.8
Drowning Submersion	64	2.6	1.8	13	1.1	0.4
Fall	137	5.6	3.9	160	14.0	4.4
Fire Flame Burn	71	2.9	2.0	38	3.3	1.1
Hot Object Burn	5	0.2	0.1	2	0.2	0.1
Firearm	651	26.8	18.8	134	11.7	3.7
Machinery	25	1.0	0.7	0	0.0	0.0
Motor vehicle traffic	626	25.8	18.0	291	25.4	8.1
Pedal Cyclist Other	4	0.2	0.1	2	0.2	0.1
Pedestrian	13	0.5	0.4	3	0.3	0.1
Land Transport Other	42	1.7	1.2	13	1.1	0.4
Other Transport	23	0.9	0.7	0	0.0	0.0
Natural Environment	25	1.0	0.7	12	1.0	0.3
Overexertion	1	0.0	0.0	0	0.0	0.0
Poisoning	280	11.5	8.1	154	13.4	4.3
Struck By	25	1.0	0.7	2	0.2	0.1
Suffocation	174	7.2	5.0	120	10.5	3.3
Other causes	212	8.7	6.1	174	15.2	4.8
Total	2429	100.0	70.0	1146	100.0	31.8

^{*}Rates are per 100,000 population

There are 2 Cases of Injury Deaths of Unknown Cause

Table 7: Intent of Injury Deaths by Gender, Data, Virginia

Intent	Male	Col (%)	Rate*	Female	Col (%)	Rate*
Unintentional	1506	62.0	43.4	848	74.0	23.5
Suicide	601	24.7	17.3	169	14.7	4.7
Homicide	308	12.7	8.9	129	11.3	3.6
Legal Intervention	12	0.5	0.3	0	0.0	0.0
Total	2429	100.0	70.0	1146	100.0	31.8

^{*}Rates are per 100,000 population

There are 2 cases of injury deaths of uknown intent

Figure 8: Leading Cause of Injury Deaths by Gender, Virginia 2000

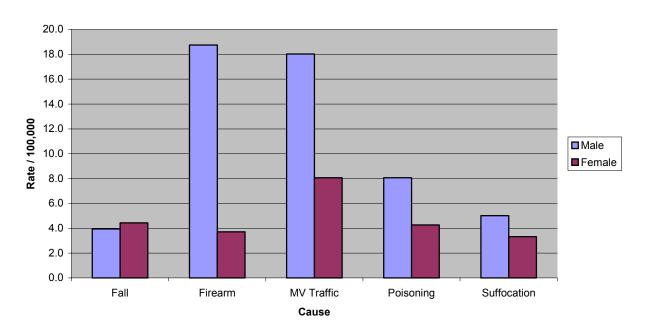
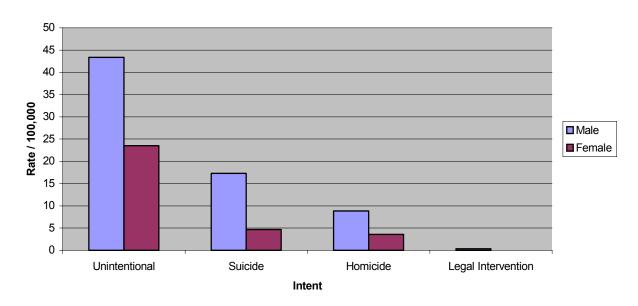


Figure 9: Intent of Injury Deaths by Gender, Virginia 2000



Causes and Intents of Injury Deaths by Race (Tables 8& 9 and Figures 10& 11)

Whites

Motor vehicle traffic, firearms and poisoning injuries were the three leading causes of injury deaths for whites and were responsible for 26.5 %, 19.9 % and 12.4 % of injury deaths respectively. Most injury deaths for whites were unintentional (68.4 %), followed by suicide (24.2 %) and homicide (7.1%)

Blacks

Blacks had higher rates of firearm injuries (28.5 %), followed by motor vehicle traffic (21.6 %) and poisoning (11.6 %). Unintentional injuries were the leading intent of injury deaths for blacks (57.7%) followed by homicide (30.3%) and suicide (11.4%).

Others

For all other races, motor vehicle traffic was the leading cause of injury deaths (39.3 %), firearms were the second (31.1 %) and suffocation was the third (6.6 %) leading cause of injury deaths. Fifty-three percent of injury deaths for other races were unintentional. Almost 28.0% were due to suicide and 18.0 % were due to homicide.

Table 8: Cause of Injury Deaths by Race, E Coded Data, Virginia 2000

rabio di Cado di Injary Boatilo by Raco, Il Codo Bata, Virginia 1000											
Cause	White	Col (%)	Rate*	Black	Col (%)	Rate*	Other	Col (%)	Rate*		
Cut pierce	46	1.7	0.9	30	3.9	2.2	1	1.6	0.2		
Drowning Submersion	49	1.8	1.0	28	3.7	2.0	0	0.0	0.0		
Fall	271	9.9	5.3	23	3.0	1.7	3	4.9	0.5		
Fire Flame Burn	72	2.6	1.4	36	4.7	2.6	1	1.6	0.2		
Hot Object Burn	5	0.2	0.1	2	0.3	0.1	0	0.0	0.0		
Firearm	547	19.9	10.7	217	28.5	15.6	19	31.1	3.3		
Machinery	24	0.9	0.5	1	0.1	0.1	0	0.0	0.0		
Motor vehicle traffic	728	26.5	14.2	164	21.6	11.8	24	39.3	4.2		
Pedal Cyclist Other	5	0.2	0.1	1	0.1	0.1	0	0.0	0.0		
Pedestrian	10	0.4	0.2	6	8.0	0.4	0	0.0	0.0		
Land Transport Other	50	1.8	1.0	4	0.5	0.3	1	1.6	0.2		
Other Transport	18	0.7	0.4	5	0.7	0.4	0	0.0	0.0		
Natural Environment	24	0.9	0.5	13	1.7	0.9	0	0.0	0.0		
Overexertion	1	0.0	0.0	0	0.0	0.0		0.0	0.0		
Poisoning	342	12.4	6.7	88	11.6	6.3	3	4.9	0.5		
Struck By	20	0.7	0.4	6	0.8	0.4	1	1.6	0.2		
Suffocation	230	8.4	4.5	60	7.9	4.3	4	6.6	0.7		
Other causes	306	11.1	6.0	76	10.0	5.5	4	6.6	0.7		
Total	2749	100.0	53.7	761	100.0	54.7	61	100.0	10.7		

^{*}Rates are per 100,000 population

There is 1 Case of Injury Death of Unknown Cause

Table 9: Intent of Injury Deaths by Race, Virginia 2000

		White			Black		Other			
Intent	Count	Col %	Rate*	Count	Col %	Rate*	Count	Col %	Rate*	
Unintentional	1881	68.4	36.7	439	57.8	31.6	32	52.5	5.6	
Suicide	665	24.2	13.0	87	11.4	6.3	17	27.9	3.0	
Homicide	195	7.1	3.8	230	30.3	16.5	11	18.0	1.9	
Legal Intervention	7	0.3	0.1	4	0.5	0.3	1	1.6	0.2	
Table Total	2749	100	53.7	761	100	54.7	61	100	10.7	

^{*}Rates are per 100,000 population

There is 1 case of Unknown Intent

Figure 10: Leading Causes of Injury Deaths by Race, Virginia 2000

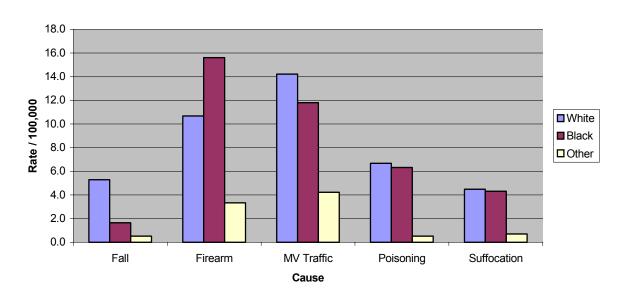
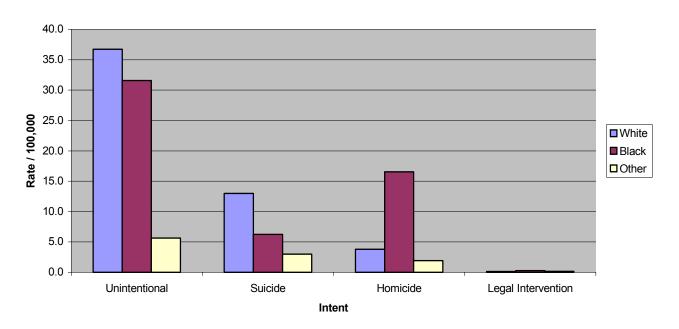


Figure 11: Intent of Injury Deaths by Race, Virginia 2000



IV. INJURY HOSPITALIZATION

In Virginia 40,223 injuries were reported in 2000. Forty-one percent of all injury hospitalizations were due to falls, 13 % were due to poisoning and 12 % were due to motor vehicle traffic. The total costs for injury hospitalizations were \$598,330,224 with an average cost of \$14,875. The average length of stay (LOS) due to injuries was five days per patient.

Although injury fatality data is a good indicator of the toll of injury related deaths, it does not reveal the whole profile of injury as most of the victims of injury survive their injuries. In 2000, for each injury death case there were eight injury hospitalizations.

Therefore injury surveillance is one of the first and most basic elements of injury prevention and control. Injury surveillance determines the magnitude of injury morbidity and mortality, the leading causes of injury, and the population groups and behaviors associated with greatest risk.

This chapter summarizes the leading causes of injury hospitalizations by age, sex, race, cost of injury hospitalizations and length of stay in hospitals due to injuries.

Causes and Intents of Injury Hospitalizations (Tables 10&11, Figures 12&13)

The leading cause of injury hospitalization was falls, which accounted for 41% of all hospital admissions. Poisoning was the second cause of injury discharges (13%) and motor vehicle traffic injuries were the third leading causes of injury hospitalizations (12%). The vast majority of hospital discharges due to injury were due to unintentional injuries (76%), self-inflicted injuries accounted for 9.5% and assault accounted for 3.5%.

Table 10: Cause of Injury Hospitalization, Virginia 2000

Cause	Frequency	Col (%)	Rate*
Cut pierce	1374	3.4	19.4
Drowning submersion	47	0.1	0.7
Fall	16378	40.7	231.4
Fire flame burn	241	0.6	3.4
Hot object burn	285	0.7	4.0
Firearm	550	1.4	7.8
Machinery	261	0.6	3.7
Motor vehicle traffic	4663	11.6	65.9
Pedal cyclist other	276	0.7	3.9
Pedestrian	42	0.1	0.6
Transport other	592	1.5	8.4
Natural environment	804	2.0	11.4
Overexertion	535	1.3	7.6
Poisoning	5120	12.7	72.3
Struck by	1360	3.4	19.2
Suffocation	201	0.5	2.8
Other causes	7494	18.6	105.9
Total	40223	100.0	568.2

^{*}Rates are per 100,000

Table 11: Intent of Injury Hospitalizations, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	30580	76	432.0
Self-inflicted	3833	10	54.1
Assault	1399	3	19.8
Undetermined	4411	11	62.3
Total	40223	100	568.2

^{*}Rates are per 100,000

Figure 12: Leading Causes of Injury Hospitalizations, Virginia 2000

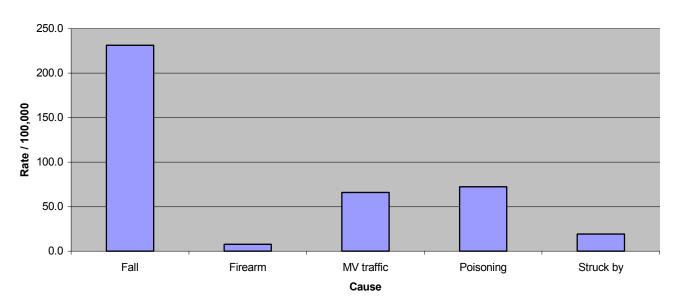
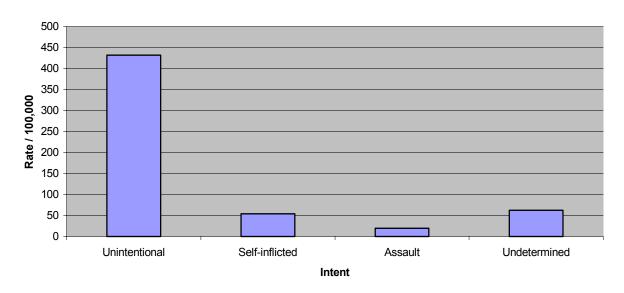


Figure 13: Intent of Injury Hospitalizations, Virginia 2000



Causes and Intents of Injury Hospitalizations by Age (Tables 12&13, Figures 14&15)

• Age 0-4

The leading cause of injury hospitalizations for this age group was falls (26.4%), followed by poisoning (13.5%) and motor vehicle traffic (7.0%). Eighty percent of the injuries were unintentional and 4% were due to assault.

• Age 5-9

Falls remained the leading cause of injury hospitalizations (32%), and motor vehicle traffic was the second leading cause of injury hospitalizations (19%). The majority of the injury hospitalizations for this age group were due to unintentional injuries (92%) and assault accounted only for 1 % of injury hospitalizations.

• Age 10-14

Falls were the leading cause of injury hospitalizations (22%), followed by motor vehicle traffic (16%) and poisoning (13%). Unintentional injuries were responsible for 80 % of injury hospitalizations, 13 % were due to self-inflicted injuries and 2 % were due to assault.

• Age 15-19

For this age group motor vehicle traffic was the leading cause of injury hospitalizations (27.7 %), followed by poisoning (27.2%) and falls (8.7 %). Most of the injury hospitalizations for this age group were unintentional (60 %), self-inflicted injuries accounted for 25 % and assault for 8 %.

• Age 20-24

Motor vehicle traffic was the leading cause of injury hospitalizations for this age group (26%), followed by poisoning (23 %). Both falls and cut pierce injuries had the same percentage (9 %) and were the third leading cause of injury hospitalization. Fifty-nine percent of injury hospitalizations were unintentional, 21 % were due self-inflicted injuries and 11 % were due to assault.

• Age 25-34

Poisoning was the leading cause of injury hospitalizations (25 %), followed by motor vehicle traffic (19%) and falls (13%). Unintentional injuries were responsible for 60 % of injury hospitalizations, self-inflicted injuries accounted for 22% and assault for 8 % of all injury hospitalizations.

• Age 35-44

Poisoning was the leading cause of injury hospitalizations (23 %), followed by falls (18.3 %) and motor vehicle traffic (15 %). Unintentional injuries were responsible for 63 % of all injury hospitalizations, self-inflicted accounted for 19% and assault for 7%.

• Age 45-54

Falls were the leading cause of injury hospitalizations (28.9 %), followed by poisoning (23.0 %) and motor vehicle traffic (15.0%). Unintentional injuries were responsible for 60% of all injury hospitalizations. Self-inflicted injuries accounted for 11% and assault for 3%.

• Age 55-64

Falls were the leading cause of injury hospitalizations (40 %) followed by motor vehicle traffic (10 %) and poisoning (8 %). The majority of injuries hospitalizations were unintentional (75%). Self-inflicted injuries accounted for 4% and assault for 1%.

• Age 65+

Falls remained the leading cause of injury hospitalizations (71.0%) followed by motor vehicle traffic (4.3%) and poisoning (3.6%). Ninety percent of injury hospitalizations were unintentional and 1% were due to self-inflicted injuries.

Table 12: Causes of Injury Hospitalizations by Age, E-Coded Hospital Discharge Data, VA 2000

		0-4years			5-9years	;		10-14year	s
Cause	Frequency	Col %	Rate*	Frequency	Col %	Rate*	requenc	Col %	Rate*
Cut pierce	26	2.2	5.6	21	3.0	4.2	42	4.6	8.5
Drowning submersion	11	0.9	2.4	4	0.6	0.8	6	0.7	1.2
Fall	314	26.4	68.0	226	32.2	45.6	205	22.4	41.3
Fire flame burn	15	1.3	3.2	7	1.0	1.4	10	1.1	2.0
Hot object burn	81	6.8	17.5	14	2.0	2.8	6	0.7	1.2
Firearm	1	0.1	0.2	3	0.4	0.6	22	2.4	4.4
Machinery	8	0.7	1.7	2	0.3	0.4	4	0.4	0.8
Motor vehicle traffic	83	7.0	18.0	131	18.7	26.5	148	16.2	29.8
Pedal cyclist other	5	0.4	1.1	48	6.8	9.7	63	6.9	12.7
Pedestrian	3	0.3	0.6	7	1.0	1.4	4	0.4	0.8
Transport other	12	1.0	2.6	12	1.7	2.4	40	4.4	8.1
Natural environment	62	5.2	13.4	49	7.0	9.9	24	2.6	4.8
Overexertion	6	0.5	1.3	0	0.0	0.0	11	1.2	2.2
Poisoning	160	13.5	34.6	28	4.0	5.7	123	13.4	24.8
Struck by	40	3.4	8.7	52	7.4	10.5	94	10.3	19.0
Suffocation	28	2.4	6.1	2	0.3	0.4	3	0.3	0.6
Other Causes	333	28.0	72.1	96	13.7	19.4	111	12.1	22.4
Total	1188	100.0	257.2	702	100.0	141.8	916	100.0	184.7

*Rates are per 100,000

		15-19yea	rs		20-24ye	ars		25-34year	s
Cause	Frequency	Col %	Rate*	Frequency	Col %	Rate*	Frequen	Col %	Rate*
Cut pierce	161	7.0	33.3	182	8.6	37.9	311	7.7	30.0
Drowning submersion	5	0.2	1.0	3	0.1	0.6	4	0.1	0.4
Fall	201	8.7	41.5	199	9.4	41.4	530	13.1	51.1
Fire flame burn	22	1.0	4.5	12	0.6	2.5	31	0.8	3.0
Hot object burn	9	0.4	1.9	13	0.6	2.7	24	0.6	2.3
Firearm	118	5.1	24.4	123	5.8	25.6	109	2.7	10.5
Machinery	13	0.6	2.7	11	0.5	2.3	59	1.5	5.7
Motor vehicle traffic	640	27.7	132.2	545	25.6	113.4	781	19.3	75.3
Pedal cyclist other	21	0.9	4.3	11	0.5	2.3	26	0.6	2.5
Pedestrian	3	0.1	0.6	0	0.0	0.0	1	0.0	0.1
Transport other	66	2.9	13.6	51	2.4	10.6	103	2.5	9.9
Natural environment	26	1.1	5.4	22	1.0	4.6	80	2.0	7.7
Overexertion	22	1.0	4.5	20	0.9	4.2	60	1.5	5.8
Poisoning	628	27.2	129.7	481	22.6	100.1	1001	24.7	96.5
Struck by	153	6.6	31.6	143	6.7	29.8	225	5.6	21.7
Suffocation	4	0.2	0.8	5	0.2	1.0	9	0.2	0.9
Other Causes	220	9.5	45.4	307	14.4	63.9	699	17.2	67.4
Total	2312	100.0	477.6	2128	100.0	442.8	4053	100.0	390.9

*Rates are per 100,000

Table 12 Continued: Causes of Injury Hospitalizations by Age, E-Coded Hospital Discharge Data, VA 2000

		35-44yea	rs		45-54ye	ars		55-64year	'S
Cause	Frequency	Col %	Rate*	Frequency	Col %	Rate*	Frequen	Col %	Rate*
Cut pierce	311	6.0	25.9	160	3.6	16.0	63	1.7	10.0
Drowning submersion	4	0.1	0.3	6	0.1	0.6	1	0.0	0.2
Fall	946	18.3	78.8	1300	28.9	130.1	1443	39.6	228.5
Fire flame burn	40	0.8	3.3	33	0.7	3.3	24	0.7	3.8
Hot object burn	47	0.9	3.9	24	0.5	2.4	26	0.7	4.1
Firearm	96	1.9	8.0	53	1.2	5.3	13	0.4	2.1
Machinery	59	1.1	4.9	36	0.8	3.6	27	0.7	4.3
Motor vehicle traffic	775	15.0	64.5	540	12.0	54.0	355	9.7	56.2
Pedal cyclist other	33	0.6	2.7	32	0.7	3.2	23	0.6	3.6
Pedestrian	6	0.1	0.5	3	0.1	0.3	2	0.1	0.3
Transport other	108	2.1	9.0	75	1.7	7.5	55	1.5	8.7
Natural environment	127	2.5	10.6	131	2.9	13.1	110	3.0	17.4
Overexertion	101	2.0	8.4	92	2.0	9.2	60	1.6	9.5
Poisoning	1189	23.0	99.0	653	14.5	65.3	302	8.3	47.8
Struck by	279	5.4	23.2	161	3.6	16.1	85	2.3	13.5
Suffocation	12	0.2	1.0	18	0.4	1.8	19	0.5	3.0
Other causes	1027	19.9	85.5	1182	26.3	118.3	1036	28.4	164.0
Total	5160	100.0	429.8	4499	100.0	450.2	3644	100.0	576.9

*Rates are per 100,000

		65 & Up			Total	
Cause	Frequency	Col %	Rate*	Frequency	Col (%)	Rate*
Cut pierce	97	0.6	12.2	1374	3.4	19.4
Drowning submersion	3	0.0	0.4	47	0.1	0.7
Fall	11014	70.5	1390.1	16378	40.7	231.4
Fire flame burn	47	0.3	5.9	241	0.6	3.4
Hot object burn	41	0.3	5.2	285	0.7	4.0
Firearm	12	0.1	1.5	550	1.4	7.8
Machinery	42	0.3	5.3	261	0.6	3.7
Motor vehicle traffic	665	4.3	83.9	4663	11.6	65.9
Pedal cyclist other	14	0.1	1.8	276	0.7	3.9
Pedestrian	13	0.1	1.6	42	0.1	0.6
Transport other	70	0.4	8.8	592	1.5	8.4
Natural environment	173	1.1	21.8	804	2.0	11.4
Overexertion	163	1.0	20.6	535	1.3	7.6
Poisoning	555	3.6	70.0	5120	12.7	72.3
Struck by	128	0.8	16.2	1360	3.4	19.2
Suffocation	101	0.6		201	0.5	
Other causes	2483	15.9	313.4	7494	18.6	105.9
Total	15621	100.0	1971.5	40223	100.0	568.2

*Rates are per 100,000

Table 13: Intent of Injury Hospitalization by Age, E-Coded Hospital Discharge Data, VA 2000

	0-4 year	'S	5-9 ye	ars	10-1	4 years	15-19 ye	ars
Intent	Count	Col %	Count	Col %	Coun	t Col	% Count	Col %
Unintentional	946	79.6	64	4 91	.7	['] 36 8	0.3 1388	60.0
Self inflicted	6	0.5	5	1 0	.1 1	17 1	2.8 567	24.5
Assault	46	3.9		7 1	.0	14	1.5 193	8.3
Undetermined	190	16.0	5	0 7	.1	49	5.3 164	7.1
Total	1188	100.0	70	2 100	.0	10	0.0 2312	100.0
	20-24 years	S	25-34 ye	ears	35-44	years	45-54 ye	ars
Intent	Count	Col %	Count	Col %	Count	Col	% Count	Col %
Unintentional	1266	59.5	244	5 60	.3 32	249 6	3.0 3122	69.4
Self inflicted	454	21.3	90	4 22	.3 9	77 1	8.9 50°	11.1
Assault	240	11.3	31	6 7	.8 3	352	6.8 153	3.4
Undetermined	168	7.9	38	8 9	.6 5	82 1	1.3 723	16.1
Total	2128	100.0	405	3 100	.0 51	60 10	0.0 4499	100.0
	55-64 years	3	65 & Up		Total			
Intent	Count	Col %	Count	Col %	Count	Col %	1	
Unintentional	2733	75.0	14051	89.9	30580	76.0		
Self inflicted	152	4.2	154	1.0	3833	9.5		
Assault	36	1.0	42	0.3	1399	3.5		
Undetermined	723	19.8	1374	8.8	4411	11.0		
Total	3644	100.0	15621	100.0	40223	100.0		

Figure 14: Leading Causes of Injury Hospitalizations by Age, Virginia 2000

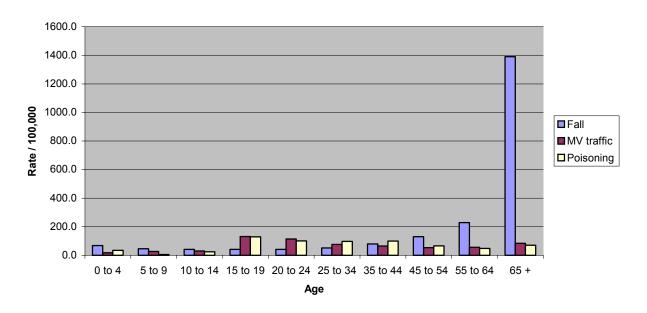
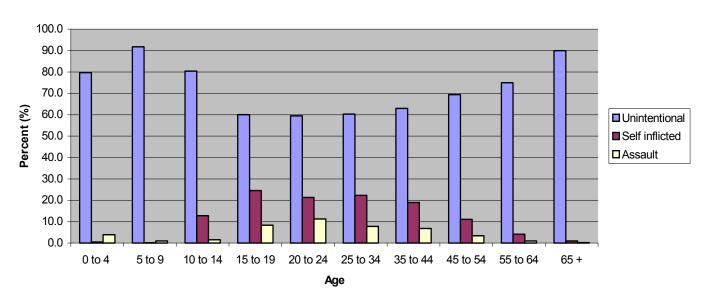


Figure 15: Intents of Injury Hospitalizations by Age, Virginia 2000



Causes and Intents of Injury Hospitalizations by Gender (Tables 14&15 and Figures 16&17)

• Both males and females had almost the same rates of injury hospitalizations. The causes and intents were variable.

Males

Falls were responsible for 31% of all injury hospitalizations followed by motor vehicle traffic (14%) and poisoning (10%). Unintentional injuries were responsible for 75% of all injury hospitalizations. Self-inflicted injuries accounted for 8% and assault for 6%.

Females

Falls were responsible for 50% of all injury hospitalizations followed by poisoning (15 %) and motor vehicle traffic (9 %). Unintentional injuries accounted for 77 %, self-inflicted accounted for 11% and assault accounted for 1%.

Table 14: Cause of Injury Hospitalizations by Gender, E-Coded Hospitalization Data, VA 2000

		Female			Male			Total	
Cause of Injury	Frequency	Col %	Rate*	Frequency	Col %	Rate*	Frequen	Col (%)	Rate*
Cut pierce	458	2.2	12.7	916	4.8	26.4	1374	3.4	19.4
Drowning submersion	11	0.1	0.3	36	0.2	1.0	47	0.1	0.7
Fall	10527	49.9	291.9	5850	30.6	168.5	16378	40.7	231.4
Fire flame burn	84	0.4	2.3	157	0.8	4.5	241	0.6	3.4
Hot object burn	141	0.7	3.9	144	0.8	4.1	285	0.7	4.0
Firearm	87	0.4	2.4	463	2.4	13.3	550	1.4	7.8
Machinery	47	0.2	1.3	214	1.1	6.2	261	0.6	3.7
Motor vehicle traffic	1915	9.1	53.1	2747	14.4	79.1	4663	11.6	65.9
Pedal cyclist other	62	0.3	1.7	213	1.1	6.1	276	0.7	3.9
Pedestrian	16	0.1	0.4	26	0.1	0.7	42	0.1	0.6
Transport other	210	1.0	5.8	382	2.0	11.0	592	1.5	8.4
Natural environment	372	1.8	10.3	431	2.3	12.4	804	2.0	11.4
Overexertion	296	1.4	8.2	239	1.3	6.9	535	1.3	7.6
Poisoning	3129	14.8	86.8	1991	10.4	57.3	5120	12.7	72.3
Struck by	325	1.5	9.0	1035	5.4	29.8	1360	3.4	19.2
Suffocation	100	0.5	2.8	101	0.5	2.9	201	0.5	2.8
Other causes	3334	15.8	92.4	4159	21.8	119.8	7494	18.6	105.9
Total	21114	100.0	585.4	19104	100.0	550.2	40223	100.0	568.2

^{*}Rates are per 100,000

There are 5 cases of injury of unknown gender, 1 fall, 1 Motor vehicle traffic, 1 pedal cyclist, 1 natural environment and 1 other unspecified.

Table 15: Intents of Injury Hospitalizations by Gender, E-Coded Hospitalization Data, VA 2000

	Female				Male		Total		
Intent	Frequency	Col %	Rate*	Frequency	Col %	Rate*	Frequency	Col (%)	Rate*
Unintentional	16341	77.4	453.1	14234	74.5	410.0	30580	76.0	432.0
Self inflicted	2381	11.3	66.0	1452	7.6	41.8	3833	9.5	54.1
Assault	284	1.3	7.9	1115	5.8	32.1	1399	3.5	19.8
Undetermined	2108	10.0	58.4	2303	12.1	66.3	4411	11.0	62.3
Total	21114	100.0	585.4	19104	100.0	550.2	40223	100.0	568.2

^{*}Rates are per 100,000

There are 5 cases of unintentional injury of unknown gender

Figure 16: Leading Causes of Injury Hospitalizations by Gender, Virginia 2000

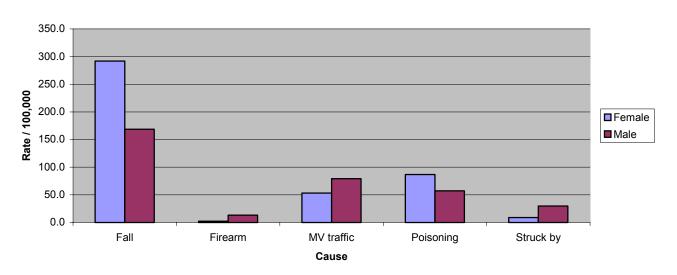
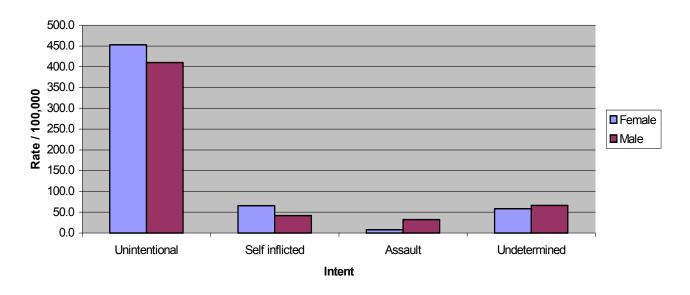


Figure 17: Intents of Injury Hospitalizations by Gender, Virginia 2000



Causes and Intents of Injury Hospitalizations by Race (Tables 16&17, Figures 18&19)

Whites

Falls were the leading cause of injury hospitalizations for whites (46.0%). Poisoning was the second leading cause (12.7%) followed by motor vehicle traffic (10.4%). Most of the injury hospitalizations were unintentional (79.5%) followed by self-inflicted (9.8%) and assault (1.8%).

Blacks

Falls were responsible for 25.7% of all injury hospitalizations. Motor vehicle traffic was the second leading cause (15.8%) and poisoning was the third (13.8%). Most of the injuries were unintentional (72.2%). Assault accounted for 10.7% of the injuries and 8.4% were self-inflicted.

Other Races

Similar for whites and blacks, falls were the leading cause of injury hospitalizations (27.2%) for other races. Motor vehicle traffic accounted for 13.6% and poisoning accounted for 11.1% of all injury hospitalizations. Fifty-eight percent of the injuries were unintentional. Self-inflicted injuries were the second (9.5%) and assault was the third (3.9%).

Table 16: Cause of Injury Hospitalizations by Race, E-Coded Hospitalization Data, VA 2000

		White			Black			Other	
Cause	Frequency	Col %	Rate*	Frequency	Col %	Rate*	Frequen	Col %	Rate*
Cut pierce	852	2.9	16.6	342	5.3	25	180	4.1	31.7
Drowning submersion	29	0.1	0.6	15	0.2	1	3	0.1	0.5
Fall	13528	46.0	264.2	1663	25.7	120	1187	27.2	208.9
Fire flame burn	163	0.6	3.2	68	1.1	5	10	0.2	1.8
Hot object burn	147	0.5	2.9	115	1.8	8	23	0.5	4.0
Firearm	193	0.7	3.8	327	5.1	24	30	0.7	5.3
Machinery	187	0.6	3.7	38	0.6	3	36	0.8	6.3
Motor vehicle traffic	3050	10.4	59.6	1022	15.8	74	591	13.6	104.0
Pedal cyclist other	205	0.7	4.0	38	0.6	3	33	0.8	5.8
Pedestrian	30	0.1	0.6	8	0.1	1	4	0.1	0.7
Transport other	516	1.8	10.1	49	0.8	4	27	0.6	4.8
Natural environment	622	2.1	12.1	129	2.0	9	53	1.2	9.3
Overexertion	409	1.4	8.0	93	1.4	7	33	0.8	5.8
Poisoning	3744	12.7	73.1	893	13.8	64	483	11.1	85.0
Struck by	819	2.8	16.0	381	5.9	27	160	3.7	28.2
Suffocation	147	0.5	2.9	37	0.6	3	17	0.4	3.0
Other causes	4747	16.2	92.7	1257	19.4	90	1490	34.2	262.3
Total	29388	100.0	574.0	6475	100.0	466	4360	100.0	767.5

^{*}Rates are per 100,000

Table 17: Intent of Injury Hospitalizations by Race, E-Coded Hospitalization Data, VA 2000

	White			Black			Other		
Intent	Frequency	Col %	Rate*	Frequency	Col %	Rate*	Frequency	Col %	Rate*
Unintentional	23373	79.5	456.5	4664	72.0	335.5	2543	58.3	447.6
Self inflicted	2878	9.8	56.2	542	8.4	39.0	413	9.5	72.7
Assault	535	1.8	10.4	696	10.7	50.1	168	3.9	29.6
Undetermined	2602	8.9	50.8	573	8.8	41.2	1236	28.3	217.6
Total	29388	100.0	574.0	6475	100.0	465.7	4360	100.0	767.5

^{*}Rates are per 100,000

Figure 18: Leading Causes of Injury Hospitalizations by Race, Virginia 2000

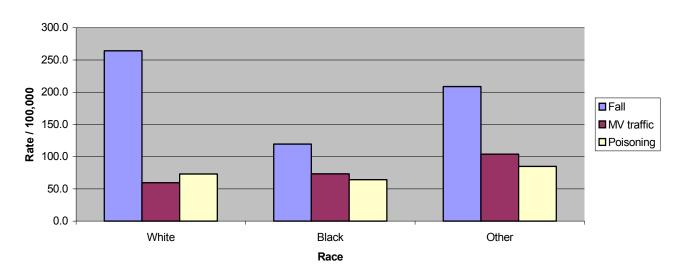
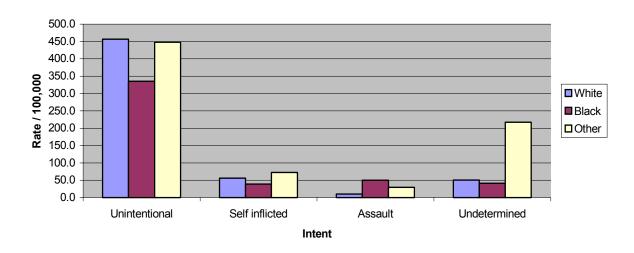


Figure 19: Intent of Injury Hospitalizations by Race, Virginia 2000



V. HOSPITAL CHARGES FOR INJURIES AND LENGTH OF STAY (LOS)

In this section, data is provided on the total and average cost and length of stay in hospitals due to injuries by cause, intent, age, gender and race. Data on the cost of injuries can be important in prioritizing costly injuries for preventive efforts. Length of stay (LOS) in hospitals due to injuries can be a good indicator of productivity lost and possible lifetime disabilities due to injuries.

Total and Average Charges and Length of Stay by Cause and Intent (Tables 18&19, Figure 20&21)

The total cost for injury-related hospitalizations in 2000 was \$ 598,330,224. Injuries due to falls had the highest cost \$216,259,415. Motor vehicle traffic injuries resulted in second highest charges of \$83,836,727 and poisoning resulted in the third highest cost of \$33,981,923. The cost for unintentional injuries was highest at \$408,874,973. The cost for self-inflicted injuries was \$25,028,032 and for assault was \$21,706,471.

The average over all length of stay (LOS) due to injuries was 5 days. The average LOS was the highest for suffocation 8 days, followed by fire burn injuries (7 days). The average LOS was highest for unintentional injuries (5.2 days), followed by assault injuries (4.9 days) and self-inflicted injuries (3.1 days).

Table 18: Total Charges and LOS by Cause of Injury, E-Coded Hospital

Cause of Injury	Frequency	Col %	Total Charges (\$)	Average Ch	Total LOS	Average LOS
Cut pierce	1374	3.4	12,253,682	8,918	5226	3.8
Drowning submersion	47	0.1	407,271	8,665	114	2.4
Fall	16378	40.7	216,259,415	13,204	89949	5.5
Fire flame burn	241	0.6	4,979,155	20,660	1765	7.3
Hot object burn	285	0.7	4,218,277	14,801	1959	6.9
Firearm	550	1.4	12,605,645	22,919	3153	5.7
Machinery	261	0.6	2,757,454	10,565	870	3.3
Motor vehicle traffic	4663	11.6	83,836,727	17,979	22785	4.9
Pedal cyclist other	276	0.7	3,148,354	11,407	1030	3.7
Pedestrian	42	0.1	978,736	23,303	303	7.2
Transport other	592	1.5	7,260,244	12,264	2155	3.6
Natural environment	804	2.0	6,224,483	7,742	2877	3.6
Overexertion	535	1.3	4,717,025	8,817	1778	3.3
Poisoning	5120	12.7	33,981,923	6,637	14807	2.9
Struck by	1360	3.4	13,943,317	10,252	4792	3.5
Suffocation	201	0.5	4,451,444	22,146	1664	8.3
Other causes	7494	18.6	186,307,072	24,861	64697	8.6
Total	40223	100.0	598,330,224	14,875	219924	5.5

Table 19: Total Charges and LOS by Intent of Injury, E-Coded Hospital Discharge Data, VA 2000.

Intent	Frequency	Col %	Total Charges (\$)	Average Charges	Col %	Total LOS	Average LOS
Unintentional	30580	76	408,874,973	13,371	76.0	157723	5.2
Self-inflicted	3833	10	25,028,032	6,530	9.5	11853	3.1
Assault	1399	3	21,706,471	15,516	3.5	6922	4.9
Undetermined	4411	11	142,720,748	32,356	11.0	43426	9.8
Total	40223	100	598,330,224	14,875	100.0	219924	5.5

Figure 20: Average Hospital Charges for the Leading Causes of Injury Hospitalizations, Virginia 2000

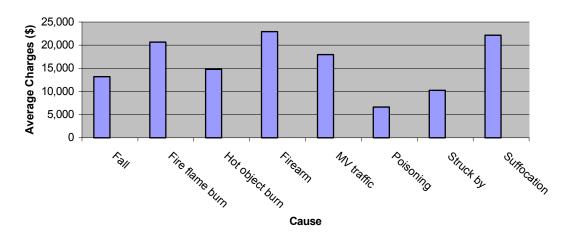
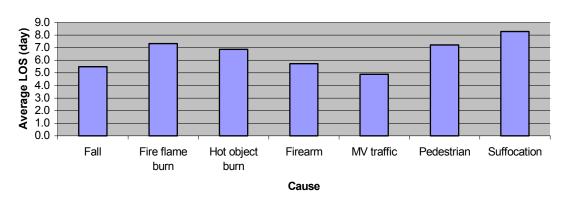


Figure 21: Average LOS by Leading Causes of Injury Hospitalizations, Virginia 2000



Total and Average Hospital Charges and Length of Stay for Injury-related Hospitalizations by Age (Table 20 and Figures 22 & 23).

Senior citizens (65 years old and above) had the highest cost of injury hospitalizations (\$254,476,707) and accounted for 39 % of all hospital charges for injuries. The age group of 45 to 54 had the second highest charges at \$70,119,145 followed by the age group of 55 to 64 at \$66,893,278.

The oldest age group (65 and above) had the highest average LOS due to injuries (6.8 days). The youngest age group (0 to 4 years) and the age group of 55 to 64 had the second highest average LOS (6.2 days).

Table 20: Total Charges and LOS by Age, E-Coded Hospital Discharge Data, VA 2000

Age	Group	Frequency	Col %	Total Charges (\$)	Average Charges	Total LOS	Average LOS
0-4	Υ	1188	3	20,541,744	17,291	7322	6.2
5-9	Υ	702	2	6,002,638	8,551	2268	3.2
10-1	4 Y	916	2	9,238,449	10,086	2978	3.3
15-1	9 Y	2312	6	28,780,474	12,448	9379	4.1
20-2	4 Y	2128	5	27,358,028	12,856	8313	3.9
25-3	4 Y	4053	10	48,870,880	12,058	15590	3.8
35-4	4 Y	5160	13	66,048,881	12,800	22554	4.4
45-5	4 Y	4499	11	70,119,145	15,585	23583	5.2
55-6	4 Y	3644	9	66,893,278	18,357	22452	6.2
65+		15621	39	254,476,707	16,291	105485	6.8
Tota	ıl	40223	100	598,330,224	14,875	219924	5.5

Figure 22: Average Hospital Charges for Injury Hospitalizations by Age, Virginia 2000

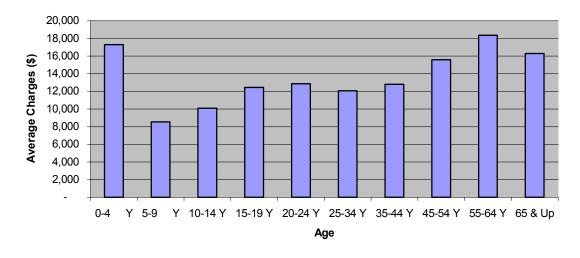
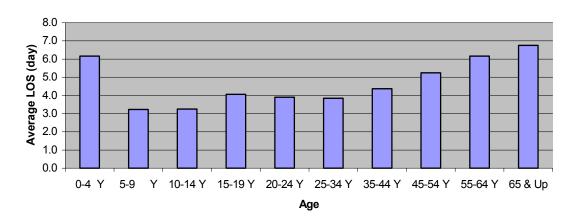


Figure 23: Average LOS in Hospital due to Injuries by Age, Virginia 2000



Total and Average Hospital Charges and Length of Stay for Injury-related Hospitalizations by Gender (Table 21 & Figures 24&25).

Males had higher hospital charges (\$314,287,583) than females (\$283,969,628). Males also had a higher average LOS (5.6 days) than females (5.4 days),

Table 21: Total Charges and LOS by Gender, E-Coded Hospital Discharge Data, VA 2000

Gender	Frequency	Col %	Total Charges (\$)	Average Charges	Total LOS	Average LOS
Female	21114	52.5	283,969,628	13,449	113752	5.4
Male	19104	47.5	314,287,583	16,451	106143	5.6
Total	40223	100.0	598,330,224	14,875	219924	5.5

There are 5 cases of unknown gender

Figure 24: Average Hospital Charges for Injuries by Gender, Virginia 2000

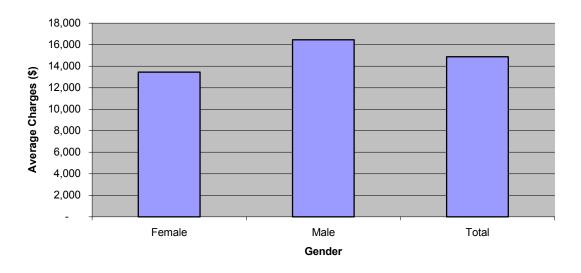
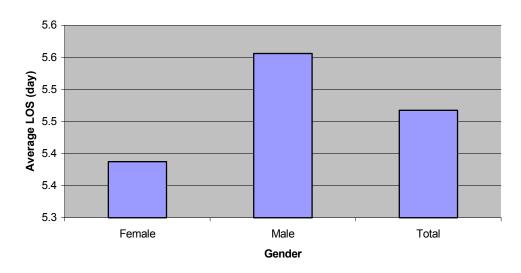


Figure 25: Average LOS in Hospitals due to Injuries by Gender, Virginia 2000



Total and Average Hospital Charges and Length of Stay for Injury-related Hospitalizations by Race (Table 22 & Figures 26&27).

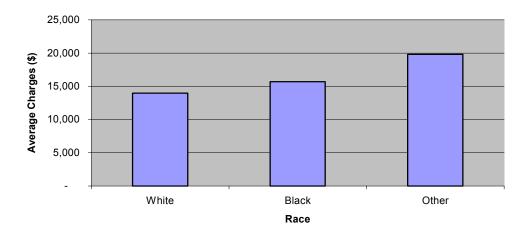
Whites had the highest hospital charges due to injury-related hospitalizations (\$410,345,385) followed by Blacks (\$101,595,922) and other races (\$86,388,917).

Average LOS was higher for other races (6.4 days) than for blacks (5.6 days) and whites (5.3 days).

Table 22: Total Charges and LOS by Race, E-Coded Hospital Discharge Data, VA 2000

Race	Frequency	Col %	Total Charges (\$)	Average Charges	Total LOS	Average LOS
White	29388	73.1	410,345,385	13,963	155617	5.3
Black	6475	16.1	101,595,922	15,690	36459	5.6
Other	4360	10.8	86,388,917	19,814	27848	6.4
Total	40223	100.0	598,330,224	14,875	219924	5.5

Figure 26: Average Hospital Charges for Injuries by Race, Virginia 2000



VI. ANALYSIS OF SPECIFIC CAUSES OF INJURY DEATHS AND HOSPITALIZATION

Introduction

This chapter contains information about the leading causes of injury deaths and hospitalizations during year 2000. This information is useful in assessing different demographic patterns for selected injuries. Hospital charges and length of stay (LOS) in hospitals for each cause of injury is also provided.

Cuts and Pierces

- In 2000, cuts and pierces were the fourth leading cause of injury hospitalizations (n= 1,374) in Virginia with a rate of 19.4/100,000.
- Most of the cut/pierce injury hospitalizations were unintentional (n= 617).
- The age group 20 to 24 had the highest rate of hospitalizations 37.9/100,000.
- Males had the highest rate of cut pierce injury hospitalizations with a rate of 25.4/100,000.
- Hospitalizations due to cut pierce injuries had an average charge of \$8,918 and average stay of 3.8 day.
- The total number of deaths due to cuts and pierces was 77.
- Homicide was the leading intent of injury deaths due to cuts and pierce injuries with a rate of 0.8/100,000.
- The age group 20 to 24 had the highest rate of injury deaths due to cuts and pierces (1.9/100,000).
- Males had a 75 % higher rate of cut/pierce injury deaths than females.
- Blacks were 2.5 times as likely as whites to die of cut/pierce injuries.

Table 23: Intent of Cut / Pierce Injury Deaths, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	5	6.5	0.1
Suicide	13	16.9	0.2
Homicide	59	76.6	0.8
Total	77	100.0	1.1

^{*}Rates are per 100,000 population

Table 24: Cut / Pierce Injury Hospitalizations by Intent,

Intent	Frequency	Col (%)	Rate*
Unintentional	617	44.9	8.7
Self-inflicted	453	33.0	6.4
Assault	288	21.0	4.1
Undetermined	16	1.2	0.2
Total	1374	100.0	19.4

^{*}Rates are per 100,000 population

Table 25: Cut/Pierce Injury Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	1	1.3	0.1
15 to 19	4	5.2	0.8
20 to 24	9	11.7	1.9
25 to 34	11	14.3	1.1
35 to 44	16	20.8	1.3
45 to 54	13	16.9	1.3
55 to 64	8	10.4	1.3
65 +	15	19.5	1.9
Total	77	100.0	1.1

Table 26: Cut/Pierce Injury Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	26	1.9	5.6
5 to 14	63	4.6	6.4
15 to 19	161	11.7	33.3
20 to 24	182	13.2	37.9
25 to 34	311	22.6	30.0
35 to 44	311	22.6	25.9
45 to 54	160	11.6	16.0
55 to 64	63	4.6	10.0
65 +	97	7.1	12.2
Total	1374	100.0	19.4

^{*}Rates are per 100,000 population

Table 27: Cut/Pierce Injury Deaths by Gender, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	49	63.6	1.4
Female	28	36.4	0.8
Total	77	100.0	11

^{*}Rates are per 100,000 population

Table 28: Cut/Pierce Injury Hospitalizations by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	458	33.3	13.2
Male	916	66.7	25.4
Total	1374	100.0	19.4

^{*}Rates are per 100,000 population

Table 29: Cut/Pierce Injury Deaths by Race, Virginia 2000

Race	Frequency	Percent	Rate*
White	46	59.7	0.9
Black	30	39.0	2.2
Other	1	1.3	0.2
Total	77	100.0	1.1

^{*}Rates are per 100,000 population

Table 30: Cut / Pierce Injury Hospitalizations by Race, E-coded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	852	62.0	16.6
Black	342	24.9	24.6
Other	180	13.1	31.7
Total	1374	100.0	19.4

^{*}Rates are per 100,000 population

Table 31: Total and Average Charges and LOS due to Cut/Pierce Injuries, E-coded Data, Virginia 2000

Age	Count	Col %	Total Charges (Average Charges (\$)	Total LOS	Average LOS
0 to 4	26	1.9	304,543.00	11,713.19	95	3.7
5 to 14	63	4.6	465,811.00	7,393.83	210	3.3
15 to 19	161	11.7	1,247,477.00	7,748.30	511	3.2
20 to 24	182	13.2	1,313,892.00	7,219.19	536	2.9
25 to 34	311	22.6	2,426,420.00	7,801.99	1002	3.2
35 to 44	311	22.6	2,917,729.00	9,381.77	1332	4.3
45 to 54	160	11.6	1,266,928.00	7,918.30	609	3.8
55 to 64	63	4.6	864,021.00	13,714.62	315	5.0
65 +	97	7.1	1,446,861.00	14,916.09	616	6.4
Total	1374	100.0	12,253,682.00	8,918.25	5226	3.8

Figure 27: Trend in Cut/Pierce Injury Deaths, in Virginia, 1991-2000

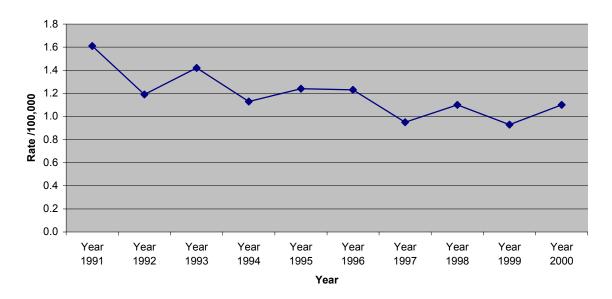


Figure 28: Intent of Cut/Pierce Injury Deaths, Virginia 2000

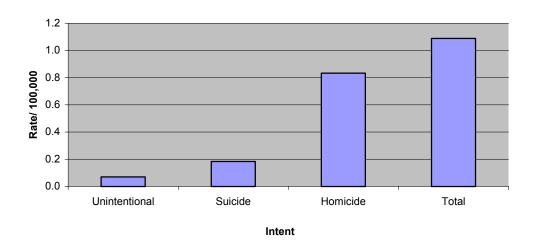


Figure 29: Intent of Cut/Pierce Injury Hospitalizations, Virginia 2000

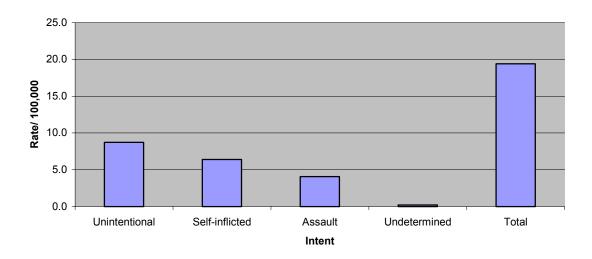


Figure 30: Cut/Pierce Injury Deaths and Hospitalizations by Age, Virginia 2000

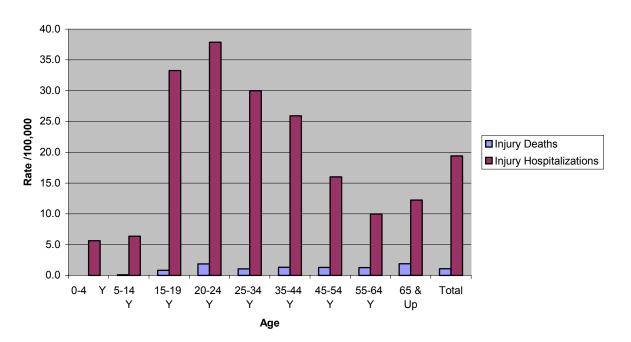


Figure 31: Cut/Pierce Injury Deaths and Hospitalizations by Gander, Virginia 2000

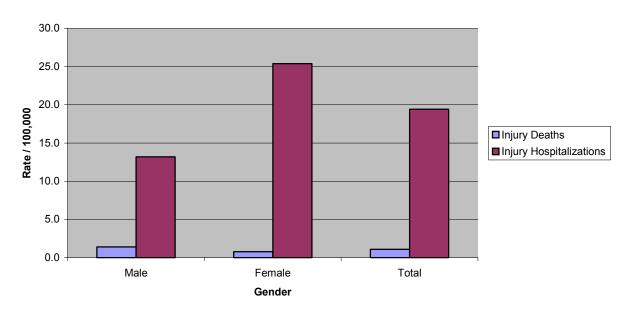
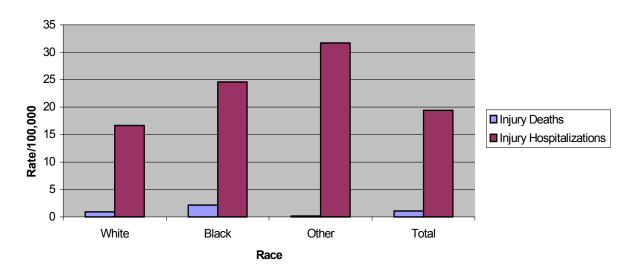


Figure 32: Cut/Pierce Injury Deaths and Hospitalizations by Race, Virginia 2000



Drowning/Submersion

- In 2000, the total number of hospitalizations due to drowning and submersions in Virginia was 47.
- All drowning and submersion injury hospitalizations were coded as unintentional (n= 47).
- The age group 0 to 4 had the highest rate at 2.4/100,000.
- Males had a higher rate of injury hospitalizations due to drowning and submersions with a rate of 1.0/100,000.
- Hospitalizations due to drowning and submersion injuries had an average charge of \$8,665 and average stay of 2.4 day.
- The total number of deaths due to drowning and submersion was 77.
- Most drowning and submersion injury deaths were unintentional with a rate of 0.9/100,000.
- The age group 45 to 54 had the highest rate of injury deaths due to drowning and submersion (1.6/100,000).
- Males were more than 4 times as likely as females to die due to drowning and submersion.
- Blacks were 2 times as likely as whites to die of drowning and submersion injuries.

Table 32: Intent of Drowning/Submersion Injuries Deaths,

Intent	Frequency	Col (%)	Rate*
Unintentional	66	85.7	0.9
Suicide	11	14.3	0.2
Total	77	100.0	1.1

^{*}Rates are per 100,000 population

Table 34: Drowning/Submersion Injuries Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	7	9.0	1.5
5-14 Y	11	14.3	1.1
15-19 Y	6	7.8	1.2
20-24 Y	4	5.2	0.8
25-34 Y	5	6.5	0.5
35-44 Y	14	18.2	1.2
45-54 Y	16	20.8	1.6
55-64 Y	4	5.2	0.6
65 +	10	12.9	1.3
Total	77	100.0	1.1

^{*}Rates are per 100,000 population

Table 33: Drowning/Submersion Injuries Hospitalizations by Intent, E-coded Data, Virginia 2000

I	Intent	Frequency	Col (%)	Rate*
	Unintentional	47	100.0	0.7

^{*}Rates are per 100,000 population

Table 35: Drowning/Submersion Injuries Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	11	23.4	2.4
5 to 14	10	21.3	1.0
15 to 19	5	10.6	1.0
20 to 24	3	6.4	0.6
25 to 34	4	8.5	0.4
35 to 44	4	8.5	0.3
45 to 54	6	12.8	0.6
55 to 64	1	2.1	0.2
65 +	3	6.4	0.4
Total	47	100.0	0.7

^{*}Rates are per 100,000 population

Table 36: Drowning/Submersion Injuries Deaths by Gender, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	64	83.1	1.8
Female	13	16.9	0.4
Total	77	100.0	1.1

^{*}Rates are per 100,000 population

Table 37: Drowning/Submersion Injuries Hospitalizations by Gender, E-coded Data,

Gender	Frequency	Col (%)	Rate*
Female	11	23.4	0.3
Male	36	76.6	1.0
Total	47	100.0	0.7

^{*}Rates are per 100,000 population

Table 38: Drowning/Submersion Injuries Deaths by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	49	63.6	1.0
Black	28	36.4	2.0
Other	0	0.0	0.0
Total	77	100.0	1.1

^{*}Rates are per 100,000 population

Table 39: Drowning/Submersion Injuries Hospitalizations by Race, E-coded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	29	61.7	0.6
Black	15	31.9	1.1
Other	3	6.4	0.5
Total	47	100.0	0.7

^{*}Rates are per 100,000 population

Table 40: Total and Average Hospital Charges and LOS due to Cut Drowning/Submersion, E-coded

Age	Frequency	Col %	Total Charges (Average Charges (\$)	Total LOS	Average LOS
0 to 4	11	23.4	56,110	5,101	14	1.3
5 to 14	10	21.3	67,856	6,786	20	2.0
15 to 19	5	10.6	22,016	4,403	6	1.2
20 to 24	3	6.4	32,938	10,979	4	1.3
25 to 34	4	8.5	27,920	6,980	6	1.5
35 to 44	4	8.5	22,922	5,731	11	2.8
45 to 54	6	12.8	64,939	10,823	20	3.3
55 to 64	1	2.1	6,406	6,406	4	4.0
65 +	3	6.4	106,164	35,388	29	9.7
Total	47	100.0	407,271	8,665	114	2.4

Figure 33: Trend in Drowning/Submersion Injury Deaths, in Virginia, 1991-2000

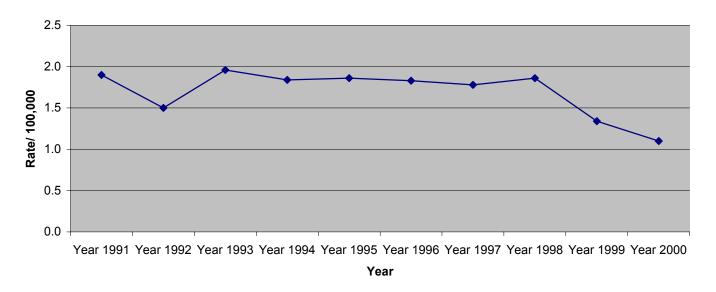


Figure 34: Intent of Drowning/Submersion Injurie Deaths, Viriginia 2000

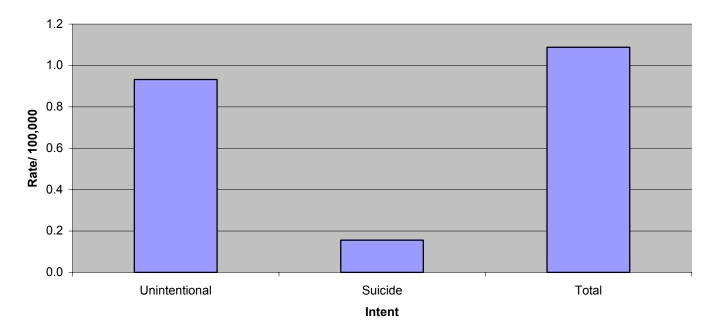


Figure 35: Drowning/Submersion Injuries by Age, Virginia 2000

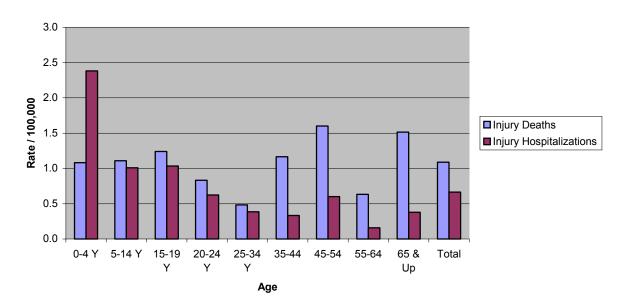
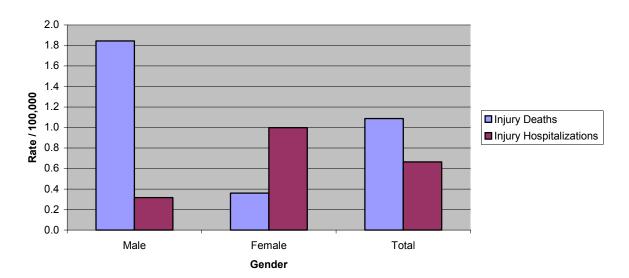
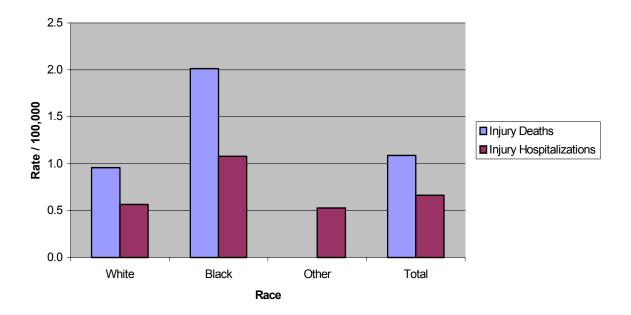


Figure 36: Drowning/Submersion Injuries by Gender, Virginia 2000







Falls

- In 2000, falls were the fourth leading cause of injury deaths (n= 297) and the first leading cause of injury hospitalizations (n=16,378) in Virginia.
- Unintentional injuries were the leading intent of fall injury hospitalizations (76%) with a rate of 432/100,000.
- The age group 65 and above had the highest rate of fall injury hospitalizations (1,390/100,000).
- Males had a higher rate of fall injury hospitalizations than females.
- Whites were more than twice as likely as blacks to be hospitalized due to fall injuries.
- Hospitalizations due to fall injuries had an average charge of \$13,204 and average stay of 5.5 days.
- Ninety-eight percent of fall injuries were unintentional with a rate of 4.1/100,000.
- Age group 65 and above had the highest rate of fall injury deaths (26.3/100,000).
- Females had a higher rate than males of fall injury deaths.
- Whites were more than 10 times as likely as blacks to die due to fall injuries.

Table 41: Fall Injury Deaths by Intent, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	291	98.0	4.1
Suicide	6	2.0	0.1
Total	297	100.0	4.2

^{*}Rates are per 100,000 population

Table 43: Fall Injury Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	2	0.7	0.4
5-14 Y	1	0.3	0.1
15-19 Y	5	1.7	1.0
20-24 Y	3	1.0	0.6
25-34 Y	8	2.7	0.8
35-44 Y	16	5.4	1.3
45-54 Y	29	9.8	2.9
55-64 Y	25	8.4	4.0
65 +	208	70.0	26.3
Total	297	100.0	4.2

^{*}Rates are per 100,000 population

Table 42: Intent of Fall Injury Hospitalizations, E-coded Data, Virginia 2000

Intent	Frequency	Percent	Rate*
Unintentional	16349	99.8	231.0
Self_inflicted	15	0.1	0.2
Assault	3	0.0	0.0
Undetermined	11	0.1	0.2
Total	16378	100.0	231.4

^{*}Rates are per 100,000 population

Table 44: Fall Injury Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Percent	Rate*
0 to 4	314	1.9	68.0
5 to 14	431	2.6	43.5
15 to 19	201	1.2	41.5
20 to 24	199	1.2	41.4
25 to 34	530	3.2	51.1
35 to 44	946	5.8	78.8
45 to 54	1300	7.9	130.1
55 to 64	1443	8.8	228.5
65 +	11014	67.2	1390.1
Total	16378	100.0	231.4

^{*}Rates are per 100,000 population

Table 45: Fall Injury Deaths by Gender, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	137	46.1	3.9
Female	160	53.9	4.4
Total	297	100.0	4.2

^{*}Rates are per 100,000 population

Table 47: Fall Injury Deaths by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	271	91.2	5.3
Black	23	7.7	1.7
Other	3	1.0	0.5
Total	297	100.0	4.2

^{*}Rates are per 100,000 population

Table 46: Fall Injury Hospitalizations by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	10527	64.3	291.9
Male	5850	35.7	168.5
Total	16378	100.0	231.4

^{*}Rates are per 100,000 population

Table 48: Fall Injury Hospitalizations by Race, E-coded Data, Virginia 2000

Race	Frequency	Percent	Rate*
White	13528	82.6	264.2
Black	1663	10.2	119.6
Other	1187	7.2	208.9
Total	16378	100.0	231.4

^{*}Rates are per 100,000 population

Table 49: Total and Average Hospital Charges and LOS due to Fall Injuries, E-coded Data, Virginia 2000

Age	Frequency	Col %	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
0 to 4	314	1.9	1,681,208	5,354	631	2.0
5 to 14	431	2.6	2,839,378	6,588	874	2.0
15 to 19	201	1.2	2,159,260	10,743	602	3.0
20 to 24	199	1.2	2,388,813	12,004	553	2.8
25 to 34	530	3.2	6,201,554	11,701	1786	3.4
35 to 44	946	5.8	10,789,980	11,406	3746	4.0
45 to 54	1300	7.9	17,441,992	13,417	5783	4.4
55 to 64	1443	8.8	21,639,145	14,996	7996	5.5
65 +	11014	67.2	151,118,085	13,721	67978	6.2
Total	16378	100.0	216,259,415	13,204	89949	5.5

Figure 38: Trend In Fall Injury Deaths in Virginia, 1991-2000

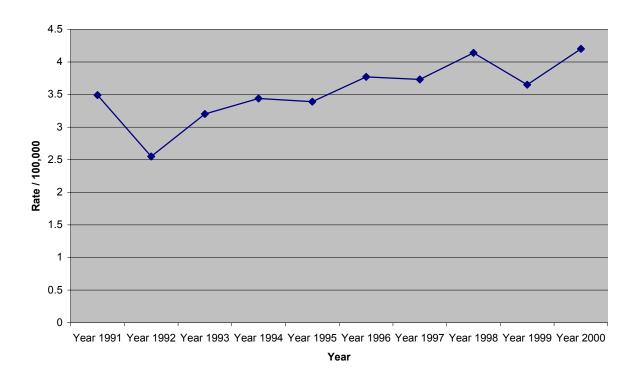


Figure 39: Fall Injury Deaths by Age, Virginia 2000

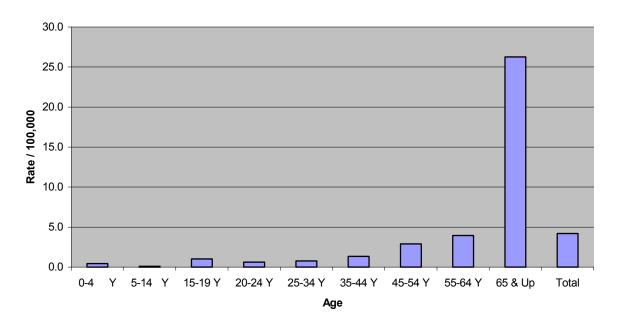


Figure 40: Fall Injury Hospitalizations by Age, Virginia 2000

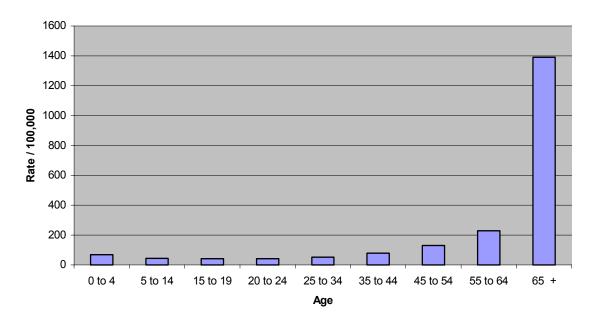


Figure 41: Fall Injury Deaths by Ay Gender, Virginia 2000

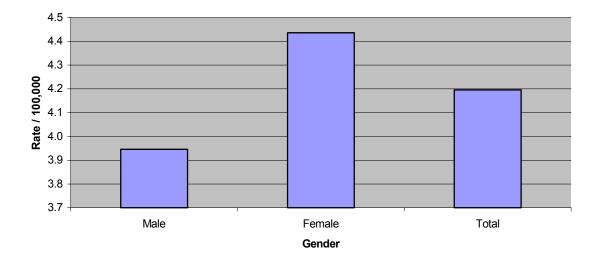


Figure 42: Fall Injury Hospitalizations by Gender, Virginia 2000

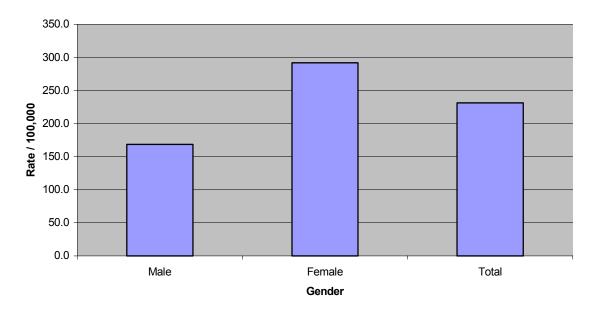


Figure 43: Fall Injury Deaths by Race, Virginia 2000

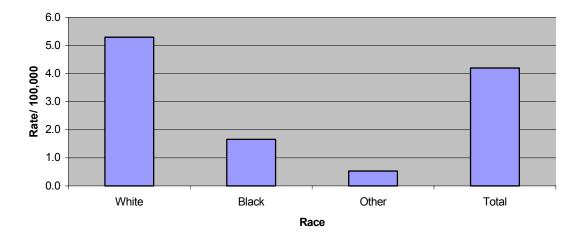


Figure 44: Fall Injury Hospitalizations by Race, Virginia 2000

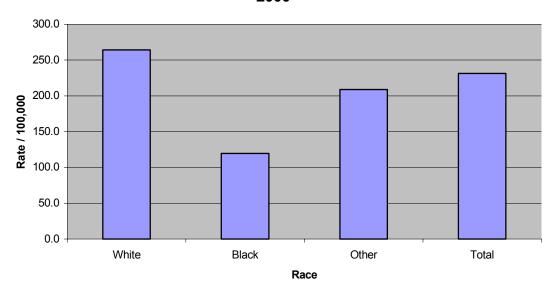


Figure 45: Average Hospital Charges for Fall Injuries by Age, Virginia 2000

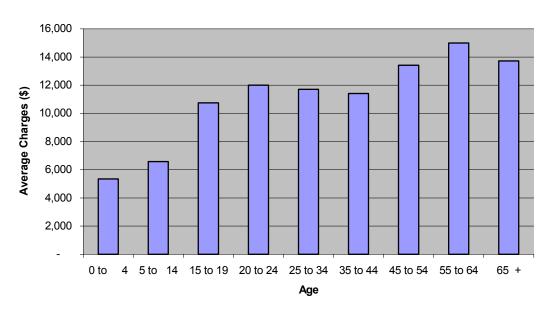
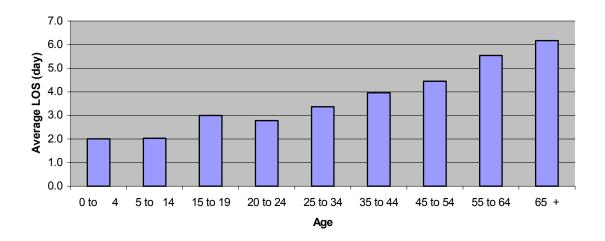


Figure 46: Average LOS due to Fall Injuries by Age, Virginia 2000



Firearms

- In 2000, firearms were the second leading cause of injury deaths (n= 785) and the seventh leading cause of injury hospitalizations (n=550) in Virginia.
- Assault was the leading intent of firearm injury hospitalizations (3.6/100,000)
- The age group 20 to 24 had the highest rate of firearm injury hospitalizations (25.6/100,000).
- Males were more than 5 times as likely as females to be hospitalized due to firearm injuries.
- Blacks were more than 6 times as likely as whites to be hospitalized due to firearm injuries.
- Hospitalizations due to firearm injuries had an average charge of \$22,919 and average stay of 6 days.
- Sixty-two percent of firearm deaths were due to suicide with a rate of 6.8/100,000.
- The age group 20 to 24 had the highest rate of firearm injury deaths (15.8/100,000).
- Males were more than 5 times as likely as females to die due to firearm injuries.
- Blacks had a higher rate of firearm injury deaths (15.6/100,000) than whites (10.7/100,000).

Table 50: Intent of Firearm Injury Deaths, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	11	1.4	0.2
Suicide	484	61.7	6.8
Homicide	285	36.3	4.0
Legal Intervention	5	0.6	0.1
Total	785	100.0	11.1

^{*}Rates are per 100,000 population

Table 52: Firearm Injury Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
5-14 Y	1	0.1	0.2
15-19 Y	55	7.0	11.4
20-24 Y	76	9.7	15.8
25-34 Y	141	18.0	13.6
35-44 Y	174	22.2	14.5
45-54 Y	111	14.1	11.1
55-64 Y	72	9.2	11.4
65 & Up	139	17.7	17.5
Total	785	100.0	11.1

^{*}Rates are per 100,000 population

Table 51: Intent of Firearm Injury Hospitalizations, E-coded Data, Virginia

Intent	Frequency	Col (%)	Rate*
Unintentional	166	30.2	2.3
Self inflicted	44	8.0	0.6
Assault	252	45.8	3.6
Undetermined	88	16.0	1.2
Total	550	100.0	7.8

*Rates are per 100,000 population

Table 53: Firearm Injury Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	1	0.2	0.2
5-9 Y	3	0.5	0.6
10-14 Y	22	4.0	4.4
15-19 Y	118	21.5	24.4
20-24 Y	123	22.4	25.6
25-34 Y	109	19.8	10.5
35-44 Y	96	17.5	8.0
45-54 Y	53	9.6	5.3
55-64 Y	13	2.4	2.1
65 & Up	12	2.2	1.5
Total	550	100.0	7.8

*Rates are per 100,000 population

Table 54: Firearm Injury Deaths by Gender, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	651	82.9	18.8
Female	134	17.1	3.7
Total	785	100.0	11.1

^{*}Rates are per 100,000 population

Table 55: Firearm Injury Hospitalizations by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	87	15.8	2.5
Male	463	84.2	12.8
Total	550	100.0	7.8

^{*}Rates are per 100,000 population

Table 56: Firearm Injury Deaths by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	547	69.7	10.7
Black	217	27.6	15.6
Other	19	2.4	3.3
Unknown	2	0.3	0.0
Total	785	100.0	11.1

^{*}Rates are per 100,000 population

Table 57: Firearm Injury Hospitalizations by Race, E-coded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	193	35.1	3.8
Black	327	59.5	23.5
Other	30	5.5	5.3
Total	550	100.0	7.8

^{*}Rates are per 100,000 population

Table 58: Total and Average Hospital Charges and LOS due to Firearm Injuries, E-coded Data, Virginia 2000

Age	Frequency	Col %	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
0 to 4	1	0.2	24,796	24,796	11	11
5 to 14	25	4.5	326,154	13,046	109	4
15 to 19	118	21.5	2,860,409	24,241	667	6
20 to 24	123	22.4	3,004,806	24,429	732	6
25 to 34	109	19.8	2,472,593	22,684	631	6
35 to 44	96	17.5	2,294,283	23,899	613	6
45 to 54	53	9.6	961,737	18,146	240	5
55 to 64	13	2.4	304,352	23,412	66	5
65 +	12	2.2	356,515	29,710	84	7
Total	550	100.0	12,605,645	22,919	3153	6

Figure 47: Trend in Firearm Injury Deaths in Virginia, 1991-2000

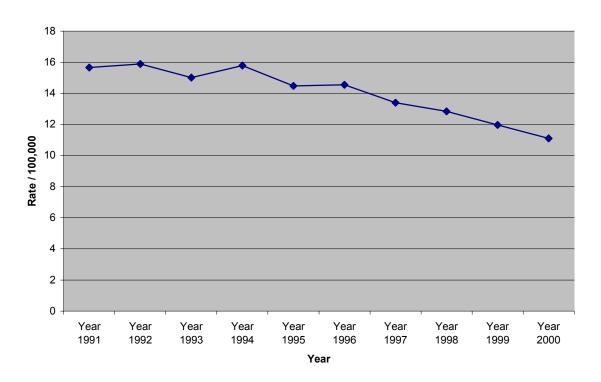


Figure 48: Intent of Firearm Injury Deaths, Virginia 2000

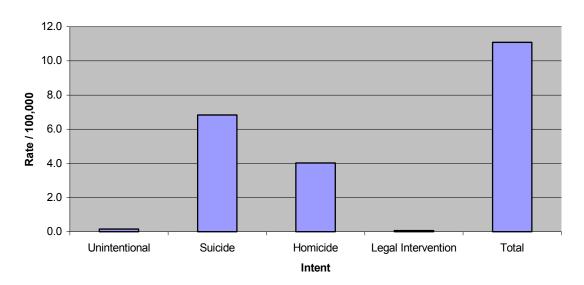


Figure 49: Intent of Firearm Injury Hospitalizations, Virginia 2000

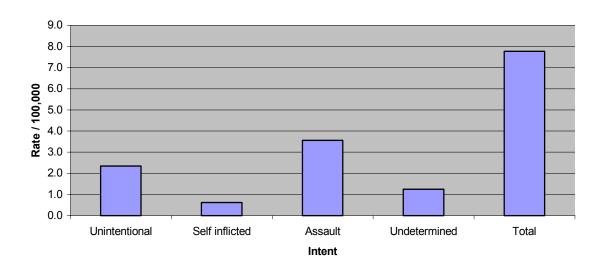


Figure 50: Firearm Injury Deaths and Hospitalizations by Age, Virginia 2000

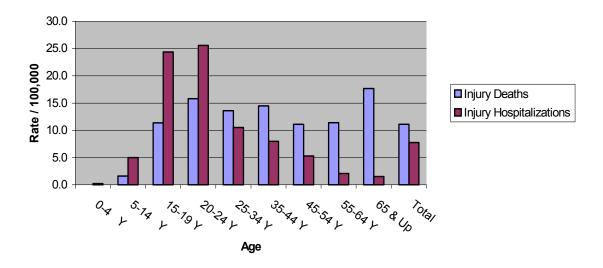


Figure 51: Firearm Injury Deaths and Hospitalizations by Gender, Virginia 2000

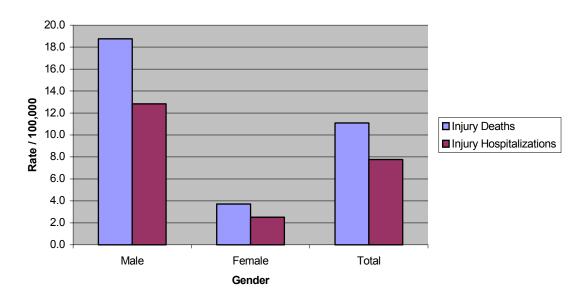


Figure 52: Firearm Injury Deaths and Hospitalizations by Race, Virginia 2000

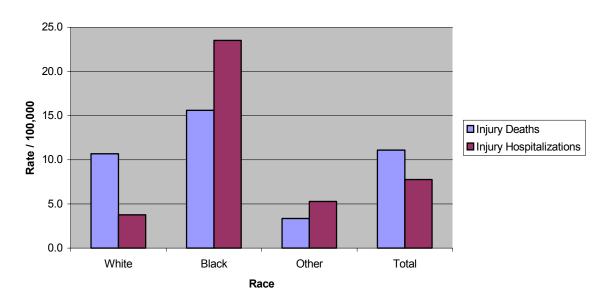


Figure 53: Average Hospital Charges for Firearm Injuries by Age, Virginia 2000

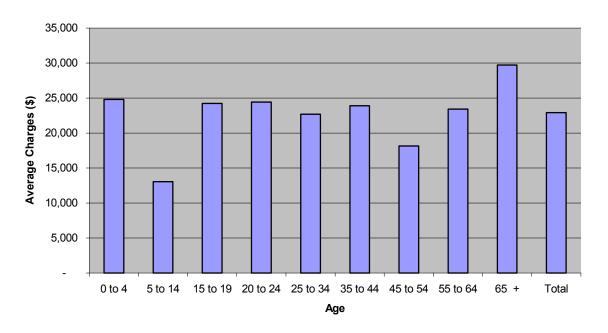
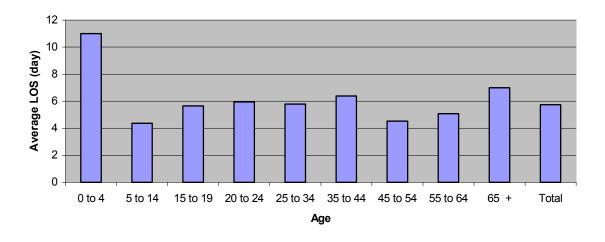


Figure 54: Average LOS due to Firearm Injuries by Age, Virginia 2000



Motor Vehicle Traffic

- In 2000, motor vehicle traffic injuries were the leading cause of injury deaths (n= 917) and the third leading cause of injury hospitalizations (n=4,663) in Virginia.
- Almost all motor vehicle traffic injury hospitalizations (99.9%) were unintentional with a rate of (65.8/100,000)
- The age group 15 to 19 had the highest rate of motor vehicle traffic hospitalizations (132.2/100,000).
- For motor vehicle traffic injury hospitalizations, males had a rate of 79.1/100,000 and females had a rate of 53.1/100,000.
- Races other than whites and blacks had the highest rate of motor vehicle traffic injury hospitalizations (104/100,000).
- Hospitalizations due to motor vehicle traffic injuries had an average charge of \$17,979 and average stay of 5 days.
- Almost all motor vehicle traffic injury deaths were unintentional (99.5%) with a rate of 12.9/100,000.
- The age group 15 to 19 had the highest rate of motor vehicle traffic injury deaths (29.3/100,000).
- Males were more than 2 times as likely as females to die due to motor vehicle traffic injuries.
- Whites had a higher rate of motor vehicle injury deaths (14.2/100,000) than blacks (11.8/100,000).

Table 59: Intent of Motor Vehicle Traffic Injury Deaths, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	912	99.5	12.9
Suicide	2	0.2	0.0
Homicide	3	0.3	0.0
Total	917	100.0	13.0

*Rates are per 100,000 population

Table 61: Motor Vehicle Traffic Injury Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	11	1.2	2.4
5-14 Y	21	2.3	2.1
15-19 Y	142	15.5	29.3
20-24 Y	105	11.5	21.8
25-34 Y	167	18.2	16.1
35-44 Y	150	16.4	12.5
45-54 Y	100	10.9	10.0
55-64 Y	69	7.5	10.9
65 +	152	16.6	19.2
Total	917	100.0	13.0

*Rates are per 100,000 population

Table 60: Intent of Motor Vehicle Traffic Injury Hospitalizations, E-coded Data, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	4658	99.9	65.8
Self-inflicted	4	0.1	0.1
Undetermined	1	0.0	0.0
Total	4663	100.0	65.9

*Rates are per 100,000 population

Table 62: Motor Vehicle Traffic Injury Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	83	1.8	18.0
5 to 14	279	6.0	28.2
15 to 19	640	13.7	132.2
20 to 24	545	11.7	113.4
25 to 34	781	16.7	75.3
35 to 44	775	16.6	64.5
45 to 54	540	11.6	54.0
55 to 64	355	7.6	56.2
65 +	665	14.3	83.9
Total	4663	100.0	65.9

*Rates are per 100,000 population

Table 63: Motor Vehicle Traffic Injury Deaths by Gender, Virginia 2000

Gender	Frequency Col (%)		Rate*	
Male	626	68.3	18.0	
Female	291	31.7	8.1	
Total	917	100.0	13.0	

^{*}Rates are per 100,000 population

Gender	Frequency	Col (%)	Rate*
Female	1915	41.1	53.1
Male	2747	58.9	79.1
Total	4663	100.0	65.9

Table 64: Motor Vehicle Traffic Injury Hospi-

talizations by Gender, E-coded Data, Vir-

Table 65: Motor Vehicle Traffic Injury Deaths by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	728	79.4	14.2
Black	164	17.9	11.8
Other	24	2.6	4.2
Total	917	100.0	13.0

^{*}Rates are per 100,000 population

Table 66: Motor Vehicle Traffic Injury Hospitalizations by Race, E-coded Data, Virginia

Race	Frequency	Col (%)	Rate*
White	3050	65.4	59.6
Black	1022	21.9	73.5
Other	591	12.7	104.0
Total	4663	100.0	65.9

^{*}Rates are per 100,000 population

Table 67: Total and Average Hospital Charges and LOS due to Motor Vehicle Traffic Injuries by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
0 to 4	83	1.8	950,234	11,449	363	4
5 to 14	279	6.0	3,632,733	13,021	1076	4
15 to 19	640	13.7	11,999,211	18,749	3619	6
20 to 24	545	11.7	10,347,359	18,986	2299	4
25 to 34	781	16.7	13,157,008	16,846	3274	4
35 to 44	775	16.6	15,079,215	19,457	3697	5
45 to 54	540	11.6	10,588,572	19,608	2918	5
55 to 64	355	7.6	6,546,156	18,440	1806	5
65 +	665	14.3	11,536,239	17,348	3733	6
Total	4663	100.0	83,836,727	17,979	22785	5

^{*}Rates are per 100,000 population

There is 1 case of MV traffic injuries of unknown gender

There is 1 case of motor vehicle traffic deaths of unki

Figure 55: Trend in Motor Vehicle Traffic Deaths in Virginia, 1991-2000

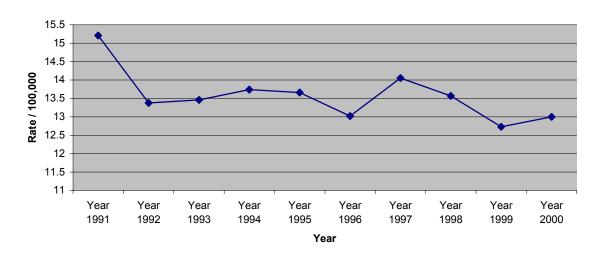


Figure 56: Motor Vehicle Traffic Injury Deaths by Age, Virginia 2000

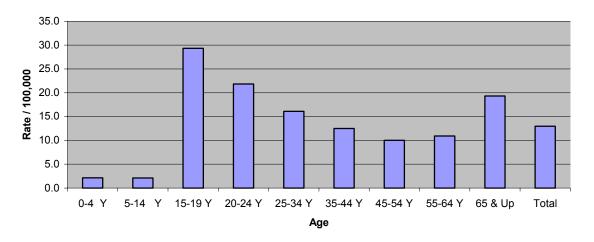


Figure 57: Motor Vehicle Traffic Injury Hospitalizations by Age, Virginia 2000

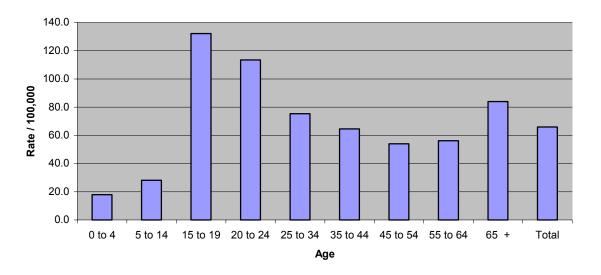


Figure 58: Motor Vehicle Traffic Injury Deaths and Hospitalizations by Gender, Virginia 2000

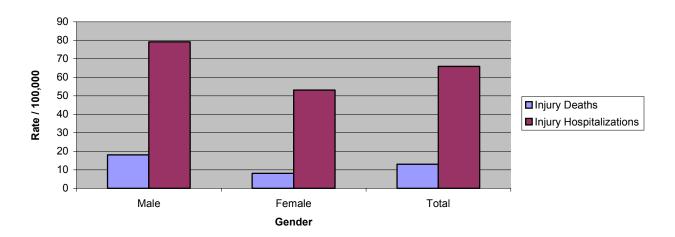


Figure 59: Motor Vehicle Traffic Deaths and Hospitalizations by Race, Virginia 2000

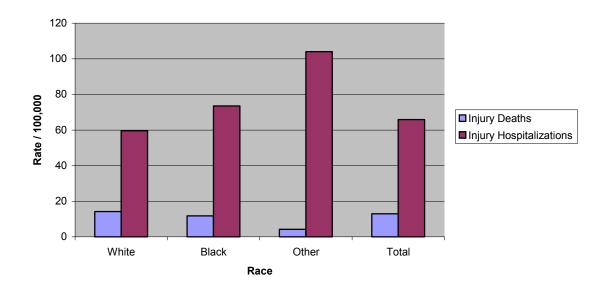


Figure 60: Average Hospital Charges for Motor Vehicle Traffic Injuries by Age, Virginia 2000

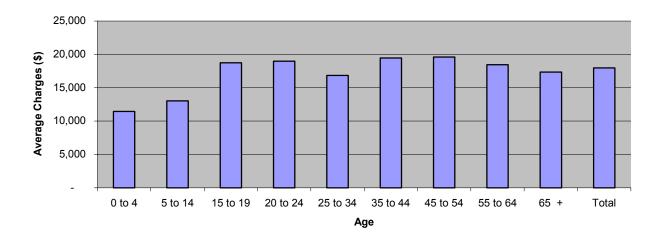
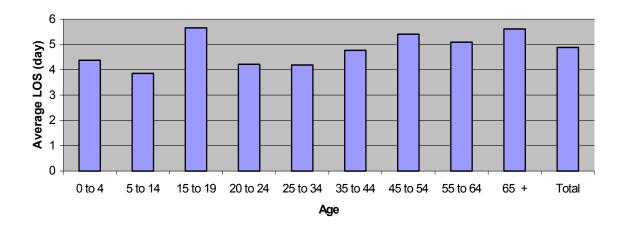


Figure 61: Average LOS in Hospitals for Motor Vehicle Traffic Injuries by Age, Virginia 2000



Poisonings

- In 2000, poisonings were the second leading cause of injury hospitalizations (n= 5,120) and the third leading cause of injury deaths (n=434) in Virginia.
- Sixty-two percent of poisoning hospitalizations were self-inflected with a rate of (44.9/100,000).
- The age group 15 to 19 had the highest rate hospitalizations due to poisonings (129.7/100,000).
- For poisoning hospitalizations, females had a rate of 86.8/100,000 and males had a rate of 57.3/100,000.
- Races other than whites and blacks had the highest rate of poisoning hospitalizations (85/100,000).
- Hospitalizations due to poisonings had an average charge of \$6,637 and average stay of 3 days.
- Sixty-nine percent of deaths due to poisoning were unintentional with a rate of 4.2/100,000 and suicide deaths by poisonings accounted for 30% of all deaths due to poisoning.
- The age group 35 to 44 had the highest rate of deaths due to poisonings 14.5/100,000.
- Males were twice as likely as females to die due to poisonings.
- Whites had a higher rate of poisoning deaths (6.7/100,000) than blacks (6.3/100,000).

Table 68: Intent of Deaths due to Poisoning, Virginia 2000

Intent	Frequency	Col (%)	Rate*	
Unintentional	300	69.1	4.2	
Suicide	132	30.4	1.9	
Homicide	2	0.5	0.0	
Total	434	100.0	6.1	

^{*}Rates are per 100,000 population

Table 69: Intent of Hospitalization due to Poisoning, E-coded Data, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	1396	27.3	19.7
Self-inflicted	3176	62.0	44.9
Assault	6	0.1	0.1
Undetermined	542	10.6	7.7
Total	5120	100.0	72.3

^{*}Rates are per 100,000 population

Table 70: Deaths due to Poisoning by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
5-14 Y	2	0.5	0.2
15-19 Y	9	2.1	1.9
20-24 Y	35	8.1	7.3
25-34 Y	81	18.7	7.8
35-44 Y	174	40.1	14.5
45-54 Y	80	18.4	8.0
55-64 Y	25	5.8	4.0
65 +	28	6.5	3.5
Total	434	100.0	6.1

^{*}Rates are per 100,000 population

Table 71: Hospitalization Cases due to Poisoning by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	160	3.1	34.6
5 to 14	151	2.9	15.2
15 to 19	628	12.3	129.7
20 to 24	481	9.4	100.1
25 to 34	1001	19.6	96.5
35 to 44	1189	23.2	99.0
45 to 54	653	12.8	65.3
55 to 64	302	5.9	47.8
65 +	555	10.8	70.0
Total	5120	100.0	72.3

^{*}Rates are per 100,000 population

Table 72: Deaths Cases due to Poisoning by Gender, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	280	64.5	8.1
Female	154	35.5	4.3
Total	434	100.0	6.1

^{*}Rates are per 100,000 population

Table 73: Hospitalization due to Poisoning by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	3129	61.1	86.8
Male	1991	38.9	57.3
Total	5120	100.0	72.3

^{*}Rates are per 100,000 population

Table 74: Deaths due to Poisoning by Race, Virginia 2000

Race	Frequency	ncy Col (%) Rate	
White	342	78.8	6.7
Black	88	20.3	6.3
Other	3	0.7	0.5
Total	434	100.0	6.1

^{*}Rates are per 100,000 population

There is 1 case of deaths due to poisoning of unknown race

Table 75: Hospitalization due to Poisoning by Race, E-coded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	3744	73.1	73.1
Black	893	17.4	64.2
Other	483	9.4	85.0
Total	5120	100.0	72.3

^{*}Rates are per 100,000 population

Table 76: Total and Average Hospital Charges and LOS for hospitalization due to Poisoning, by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
0 to 4	160	3.1	660,899	4,131	370	2
5 to 14	151	2.9	704,417	4,665	294	2
15 to 19	628	12.3	3,321,721	5,289	1397	2
20 to 24	481	9.4	2,526,265	5,252	1094	2
25 to 34	1001	19.6	5,864,730	5,859	2427	2
35 to 44	1189	23.2	7,501,606	6,309	3162	3
45 to 54	653	12.8	4,979,361	7,625	2103	3
55 to 64	302	5.9	2,638,193	8,736	1112	4
65 +	555	10.8	5,784,731	10,423	2848	5
Total	5120	100.0	33,981,923	6,637	14807	3

Figure 62: Trend in Poisoning Deaths, Virginia 1991-2000

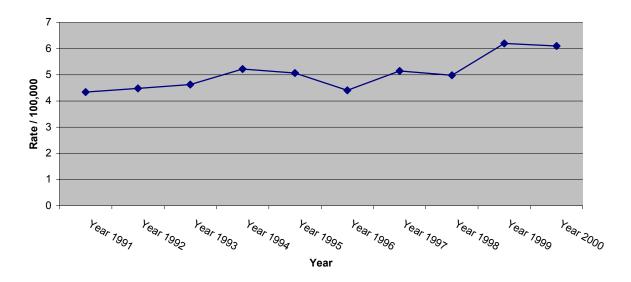


Figure 63: Intent of Poisoning Deaths , Virginia 2000

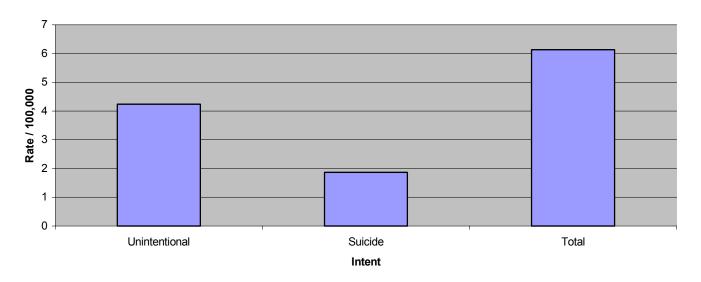


Figure 64: Intent of Poisoning Hospitalizations, Virginia 2000

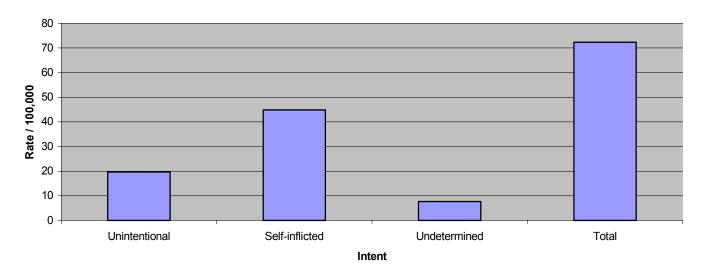
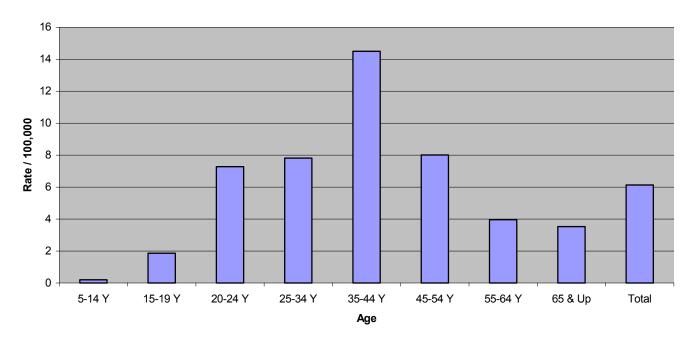
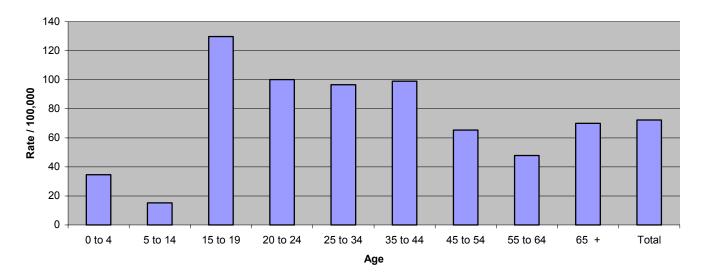


Figure 65: Poisoning Deaths by Age, Virginia 2000







Suffocation

- In 2000, suffocation was the fifth leading cause of injury deaths (n= 294) in Virginia.
- Unintentional suffocation injury accounted for 87% of all hospitalizations due to suffocation while self-inflicted accounted for 12%.
- The age group 65 and above had the highest rate of hospitalizations due to suffocation (12.7/100,000).
- Males and females had almost the same rate of hospitalizations due to suffocation, 2.9/100,000 and 2.8/100,000 respectively.
- Whites, blacks and other races had rates of 2.9/100,000, 2.7/100,000, and 3.0/100,000 respectively.
- Hospitalizations due to suffocation had an average charge of \$22,146 and average stay of 8 days.
- Unintentional deaths accounted for 60% of all deaths due to suffocation with a rate of 2.5/100,000 and suicide deaths by suffocation accounted for 34% with a rate of 1.4/100,000.
- The age group 65 and above had the highest rate of deaths due to suffocation 16.5/100,000.
- Males had a rate of 5/100,000 and females a rate of 3.3/100,000 of injury deaths due to suffocation.
- Whites had a rate of 4.5 / 100,000 and blacks had a rate of 4.3 / 100,000.

Table 77: Intent of Suffocation Injury Deaths, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	176	59.9	2.5
Suicide	100	34.0	1.4
Homicide	18	6.1	0.3
Total	294	100.0	4.2

*Rates are per 100,000 population

Table 79: Suffocation Injury Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	14	4.8	3.0
5-14 Y	7	2.4	0.7
15-19 Y	13	4.4	2.7
20-24 Y	10	3.4	2.1
25-34 Y	30	10.2	2.9
35-44 Y	31	10.5	2.6
45-54 Y	34	11.6	3.4
55-64 Y	24	8.2	3.8
65 +	131	44.6	16.5
Total	294	100.0	4.2

*Rates are per 100,000 population

Table 78: Intent of Suffocation Injury Hospitalizations, E-coded Data, Virginia 2000

Intent	Frequency	Col (%)	Rate*
Unintentional	175	87.1	2.5
Self_inflicted	24	11.9	0.3
Assault	1	0.5	0.0
Undetermined	1	0.5	0.0
Total	201	100.0	2.8

*Rates are per 100,000 population

Table 80: Suffocation Injury Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	28	13.9	6.1
5 to 14	5	2.5	0.5
15 to 19	4	2.0	0.8
20 to 24	5	2.5	1.0
25 to 34	9	4.5	0.9
35 to 44	12	6.0	1.0
45 to 54	18	9.0	1.8
55 to 64	19	9.5	3.0
65 +	101	50.2	12.7
Total	201	100.0	2.8

*Rates are per 100,000 population

Table 81: Suffocation Injury Deaths by Gender, Virginia 2000

Gender	Frequency	Percent	Rate*
Male	174	59.2	5.0
Female	120	40.8	3.3
Total	294	100.0	4.2

^{*}Rates are per 100,000 population

Table 82: Suffocation Injury Hospitalizations by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	100	49.8	2.8
Male	101	50.2	2.9
Total	201	100.0	2.8

^{*}Rates are per 100,000 population

Table 83: Suffocation Injury Deaths by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	230	78.2	4.5
Black	60	20.4	4.3
Other	4	1.4	0.7
Total	294	100.0	4.2

^{*}Rates are per 100,000 population

Table 84: Suffocation Injury Hospitalizations by Race, E-coded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	147	73.1	2.9
Black	37	18.4	2.7
Other	17	8.5	3.0
Total	201	100.0	2.8

^{*}Rates are per 100,000 population

Table 85: Total and Average Hospital Charges and LOS for Suffocation Injuries, E-coded Data, Virginia 2000

,						
Age	Count	Col (%)	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
0 to 4	28	13.9	292,520	10,447	99	4
5 to 14	5	2.5	43,246	8,649	21	4
15 to 19	4	2.0	33,872	8,468	22	6
20 to 24	5	2.5	75,941	15,188	19	4
25 to 34	9	4.5	382,125	42,458	141	16
35 to 44	12	6.0	128,136	10,678	69	6
45 to 54	18	9.0	501,097	27,839	220	12
55 to 64	19	9.5	235,075	12,372	90	5
65 +	101	50.2	2,759,432	27,321	983	10
Total	201	100.0	4,451,444	22,146	1664	8

Figure 67: Trend in Suffocation Injury Deaths in Virginia 1991-2000

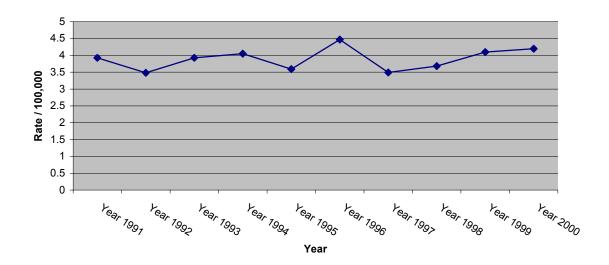


Figure 68: Intent of Suffocation Injury Deaths, Virginia 2000

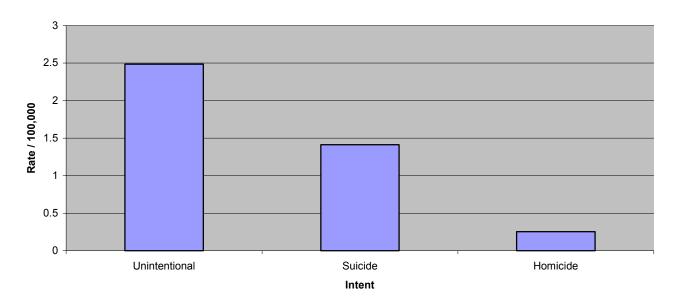


Figure 69: Intent of Suffocation Injury Hospitalizations, Virginia 2000

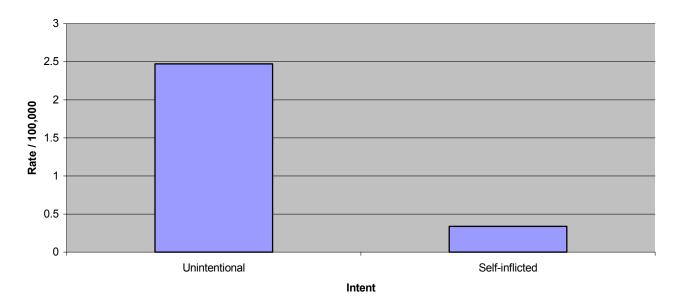


Figure 70: Suffocation Injury Deaths and Hospitalizations by Age, Virginia 2000

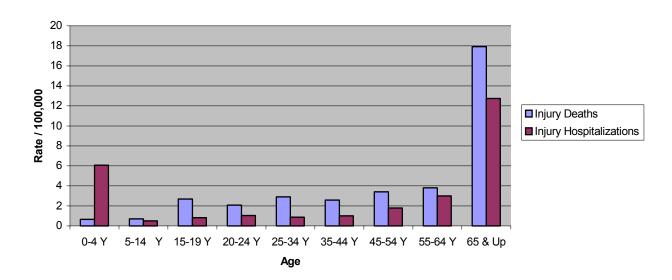


Figure 71: Suffocation Injury Deaths and Hospitalizations by Gender, Virginia 2000

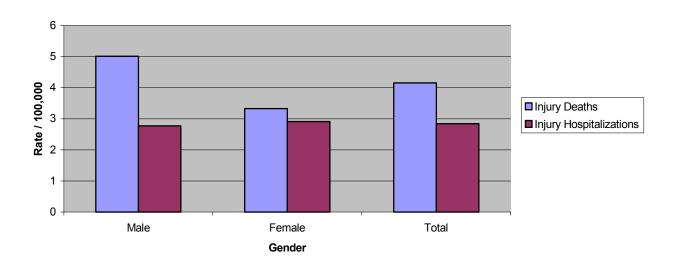


Figure 72: Suffocation Injury Deaths and Hospitalizations by Race, Virginia 2000

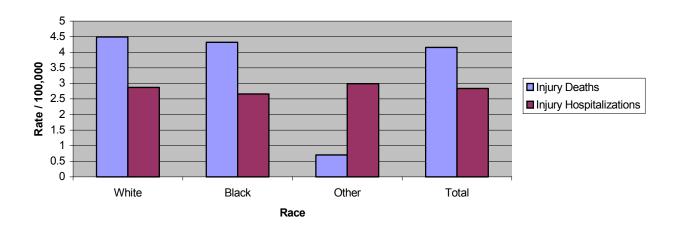


Figure 73: Average Charges for Suffocation Injury Hospitalizations by Age, Virginia 2000

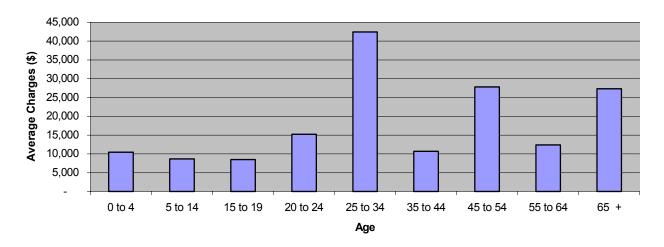
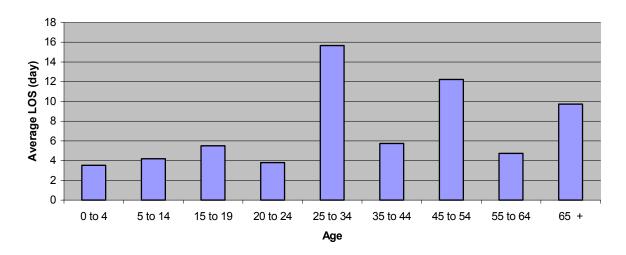


Figure 74: Average LOS in Hospitals due to Suffocation Injuries by Age, Virginia 2000



Homicide and Assault

- In 2000, homicide accounted for 12.2% of all injury deaths in Virginia with a rate of 6.2/100,000 (n=437).
- Assault accounted for 3% of all injury hospitalizations in Virginia with a rate of 19.8/100,000 (n= 1399)
- Firearms were responsible for 65.2% of homicides.
- Being struck by something was the most common method in assault injury hospitalizations (31.7%).
- The age group 20 to 24 had the highest rate of deaths due to homicide (13.7/100,000).
- The age group 20 to 24 had the highest rate of injury hospitalizations due to assaults (49.9/100,000).
- Males were more than 2 times as likely as females to die due to homicide.
- Males were more than 4 times as likely as females to be hospitalized due to assaults.
- Blacks were more than 4 times as likely as whites to die of homicide.
- Blacks were about 5 times as likely as whites to be hospitalized due to assaults.
- The average hospital charges for injuries due to assaults were \$15,516 and the average stay was 5 days.

Table 86: Methods of Homicide Deaths, Virginia 2000

Method	Frequency	Col (%)	Rate*
Cut pierce	59	13.5	0.8
Fire Flame Burn	2	0.5	0.0
Hot Object Burn	2	0.5	0.0
Firearm	285	65.2	4.0
Motor Vehicle Traffic	3	0.7	0.0
Poisoning	2	0.5	0.0
Struck By	10	2.3	0.1
Suffocation	18	4.1	0.3
Other	56	12.8	0.8
Total	437	100.0	6.2

^{*}Rates are per 100,000 population

Table 88: Homicide Deaths by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	18	4.1	3.9
5-14 Y	15	3.4	1.5
15-19 Y	34	7.8	7.0
20-24 Y	66	15.1	13.7
25-34 Y	104	23.8	10.0
35-44 Y	93	21.3	7.7
45-54 Y	49	11.2	4.9
55-64 Y	25	5.7	4.0
65 +	33	7.6	4.2
Total	437	100.0	6.2

^{*}Rates are per 100,000 population

Table 87: Methods of Assault Injury Hospitalizations, E-coded Data, Virginia 2000

Method	Frequency	Col (%)	Rate*
Cut pierce	288	20.6	4.1
Fall	3	0.2	0.0
Fire flame burn	2	0.1	0.0
Hot object burn	3	0.2	0.0
Firearm	252	18.0	3.6
Poisoning	6	0.4	0.1
Struck by	443	31.7	6.3
Suffocation	1	0.1	0.0
Other unspecified	401	28.7	5.7
Total	1399	100.0	19.8

^{*}Rates are per 100,000 population

Table 89: Assault Injury Hospitalizations by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0 to 4	46	3.3	10.0
5 to 14	21	1.5	2.1
15 to 19	193	13.8	39.9
20 to 24	240	17.2	49.9
25 to 34	316	22.6	30.5
35 to 44	352	25.2	29.3
45 to 54	153	10.9	15.3
55 to 64	36	2.6	5.7
65 +	42	3.0	5.3
Total	1399	100.0	19.8

^{*}Rates are per 100,000 population

Table 90: Homicide Deaths by Gender, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	308	70.5	8.9
Female	129	29.5	3.6
Total	437	100.0	6.2

^{*}Rates are per 100,000 population

Table 91: Assault Injury Hospitalizations by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	284	20.3	7.9
Male	1115	79.7	32.1
Total	1399	100.0	19.8

^{*}Rates are per 100,000 population

Table 92: Homicide Deaths by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	195	44.6	3.8
Black	230	52.6	16.5
Other	11	2.5	1.9
Total	437	100.0	6.2

^{*}Rates are per 100,000 population

Table 93: Assault Injury Hospitalizations by Race, Ecoded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	535	38.2	10.4
Black	696	49.7	50.1
Other	168	12.0	29.6
Total	1399	100.0	19.8

^{*}Rates are per 100,000 population

Table 94: Total and Average Hospital Charges and LOS for Injuries due to Assault, E-coded Data, Virginia 2000

Age	Count	Col (%)	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
0 to 4	46	3.3	965,784	20,995	366	8
5 to 14	21	1.5	144,672	6,889	102	5
15 to 19	193	13.8	2,950,699	15,289	778	4
20 to 24	240	17.2	4,114,629	17,144	1249	5
25 to 34	316	22.6	4,622,911	14,629	1289	4
35 to 44	352	25.2	5,508,515	15,649	1869	5
45 to 54	153	10.9	1,808,385	11,820	604	4
55 to 64	36	2.6	746,039	20,723	245	7
65 +	42	3.0	844,837	20,115	420	10
Total	1399	100.0	21,706,471	15,516	6922	5

Figure 75: Trend in Homicide in Virginia 1991-2000

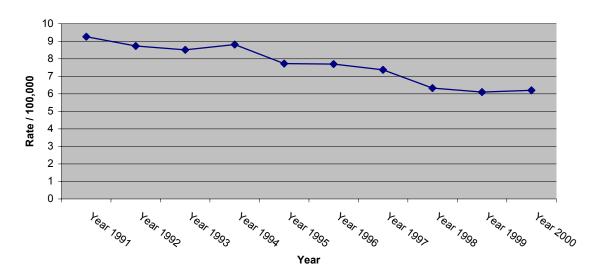


Figure 76: Methods of Homicide Deaths, Virginia 2000

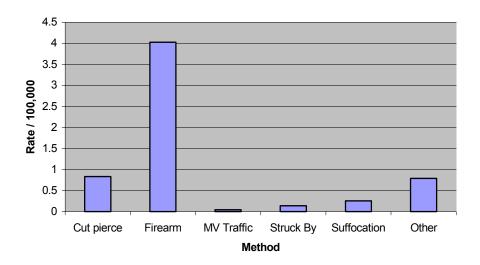


Figure 77: Methods of Assault Injuries, Virginia 2000

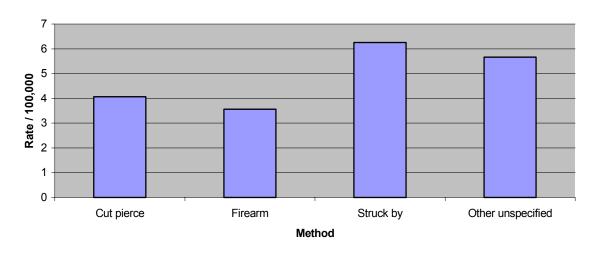


Figure 78: Homicide and Assault by Age, Virginia 2000

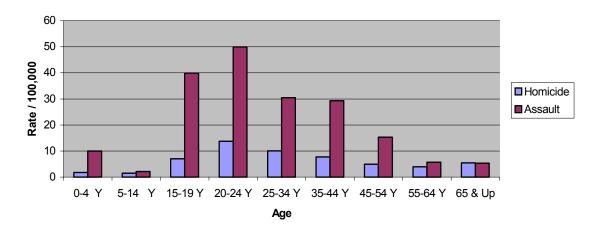


Figure 79: Homicide and Assault by Gender, Virginia 2000

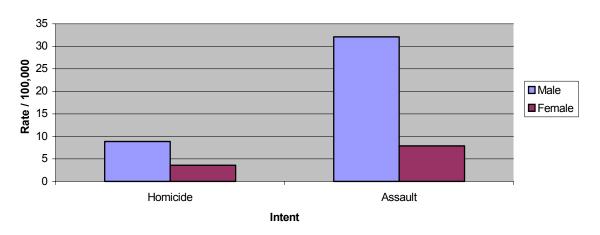


Figure 80: Homicide and Assault by Race, Virginia 2000

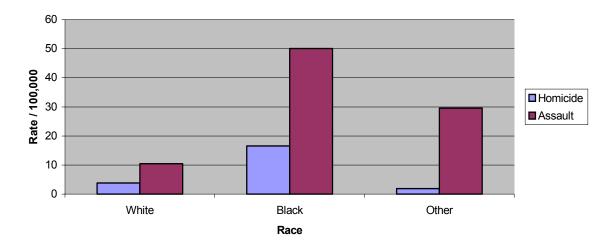


Figure 81: Average Hospital Charges for Assault Injuries by Age, Virginia 2000

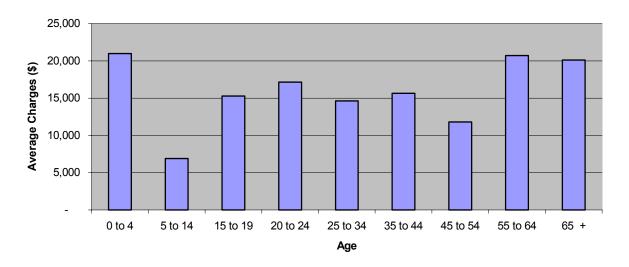
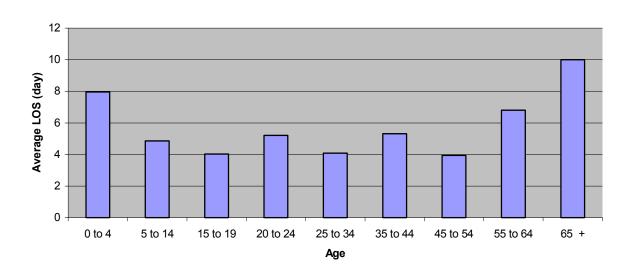


Figure 82: Average LOS in Hospital due to Assault by Age, Virginia 2000



Suicide and Self-inflicted Injuries

- In 2000, suicide accounted for 21.5% of all injury deaths in Virginia with a rate of 10.9/100,000 (n=770).
- Self-inflected injuries accounted for 10% of all injury hospitalizations in Virginia with a rate of 54.1/100,000 (n= 3,833)
- Firearm injury deaths accounted for 62.9% of all deaths due to suicide.
- Poisonings were the most common method of self-inflicted injury hospitalizations (82.9%)
- The age group of 65 and above had the highest rates of suicide (20.1/100,000)
- The age group of 15 to 19 had the highest rate of self-inflicted injury hospitalizations (117.1/100,000)
- Males were more than 3 times as likely as females to die due to suicide.
- Females had a higher rate of self-inflicted injury hospitalizations (68.6/100,000) than males (40.3/100,000).
- Whites were more than 2 times as likely as blacks to die of suicide.
- Persons of races other than whites and blacks had the highest rates of self-inflicted injury hospitalizations with a rate of 72.7/100,000.
- The average hospital charges for self-inflicted injuries were \$6,530 and the average stay was 3.1 days.

Table 95: Methods of Suicide, Virginia 2000

Cause	Frequency	Col (%)	Rate*
Cut pierce	13	1.7	0.2
Drowning Submersion	11	1.4	0.2
Fall	6	0.8	0.1
Fire Flame Burn	10	1.3	0.1
Firearm	484	62.9	6.8
MV Traffic	2	0.3	0.0
Poisoning	132	17.1	1.9
Suffocation	100	13.0	1.4
Other	12	1.6	0.2
Total	770	100.0	10.9

Table 96: Methods of Self-inflicted Injuries, Ecoded Data, Virginia 2000

Cause	Frequency	Col (%)	Rate*
Cut pierce	453	11.8	6.4
Fall	15	0.4	0.2
Fire flame burn	3	0.1	0.0
Firearm	44	1.1	0.6
MV traffic	4	0.1	0.1
Natural environment	2	0.1	0.0
Poisoning	3176	82.9	44.9
Suffocation	24	0.6	0.3
Other unspecified	112	2.9	1.6
Total	3833	100.0	54.1

Table 97: Suicide by Age, Virginia 2000

Age	Frequency	Col (%)	Rate*
5-14 Y	5	0.6	0.5
15-19 Y	46	6.0	9.5
20-24 Y	38	4.9	7.9
25-34 Y	110	14.3	10.6
35-44 Y	194	25.2	16.2
45-54 Y	139	18.1	13.9
55-64 Y	79	10.3	12.5
65 & Up	159	20.6	20.1
Total	770	100.0	10.9

Table 98: Self-inflicted Injuries by Age, E-coded Data, Virginia 2000

Age	Frequency	Col (%)	Rate*
0-4 Y	6	0.2	1.3
5-9 Y	1	0.0	0.2
10-14 Y	117	3.1	23.6
15-19 Y	567	14.8	117.1
20-24 Y	454	11.8	94.5
25-34 Y	904	23.6	87.2
35-44 Y	977	25.5	81.4
45-54 Y	501	13.1	50.1
55-64 Y	152	4.0	24.1
65 & Up	154	4.0	19.4
Total	3833	100.0	54.1

Table 99: Suicide by Gander, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Male	601	78.1	17.3
Female	169	21.9	4.7
Total	770	100.0	10.9

Table 100: Self-inflicted Injuries by Gender, E-coded Data, Virginia 2000

Gender	Frequency	Col (%)	Rate*
Female	2381	62.1	68.6
Male	1452	37.9	40.3
Total	3833	100.0	54.1

Table 101: Suicide by Race, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	665	86.4	13.0
Black	87	11.3	6.3
Other	17	2.2	3.0
Unknown	1	0.1	0.0
Total	770	100.0	10.9

Table 102: Self-inflicted Injuries by Race, E-coded Data, Virginia 2000

Race	Frequency	Col (%)	Rate*
White	2878	75.1	56.2
Black	542	14.1	39.0
Other	413	10.8	72.7
Total	3833	100.0	54.1

Table 103: Charges and LOS due to Self-inflicted Injuries by Cause, E-coded Data, Virginia 2000

Cause	Frequency	Col %	Total Charges (\$)	Average Charges (\$)	Total LOS	Average LOS
Cut pierce	453	12	2,520,293	5,564	1,904	4.2
Fall	15	0	517,793	34,520	146	9.7
Fire flame burn	3	0	9,686	3,229	9	3.0
Firearm	44	1	1,240,484	28,193	318	7.2
MV traffic	4	0	31,504	7,876	11	2.8
N.Environment	2	0	80,162	40,081	24	12.0
Poisoning	3176	83	18,686,252	5,884	8,410	2.6
Suffocation	24	1	486,356	20,265	229	9.5
Other	112	3	1,455,502	12,996	802	7.2
Total	3833	100	25,028,032	6,530	11,853	3.1

Figure 83: Trend in Suicide in Virginia, 1991-2000

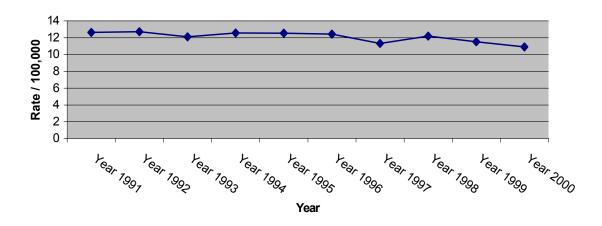


Figure 84: Methods of Suicide, Virginia 2000

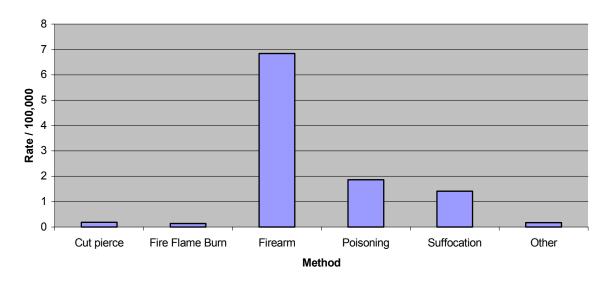


Figure 85: Methods of Self-inflicted Injuries, Virginia 2000

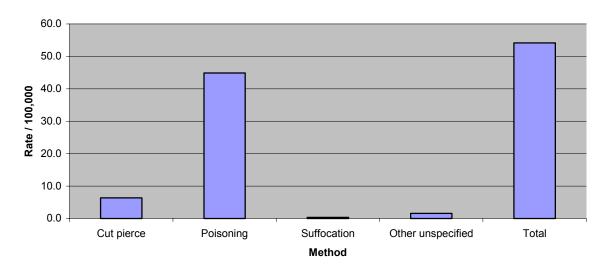


Figure 86: Suicide and Self-inflicted Injuries by Age, Virginia 2000

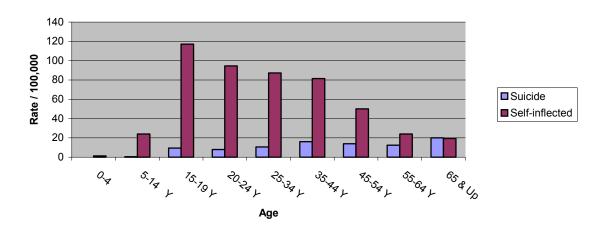


Figure 87: Suicide and Self-inflicted Injuries by Gender, Virginia 2000

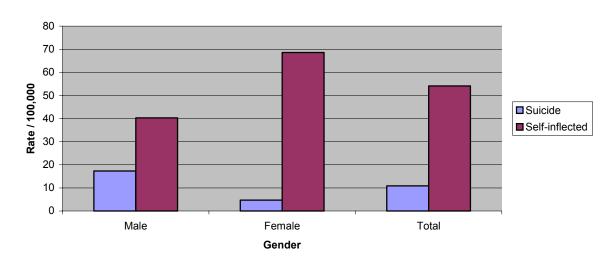


Figure 88: Suicide and Self-inflicted Injuries by Race, Virginia 2000

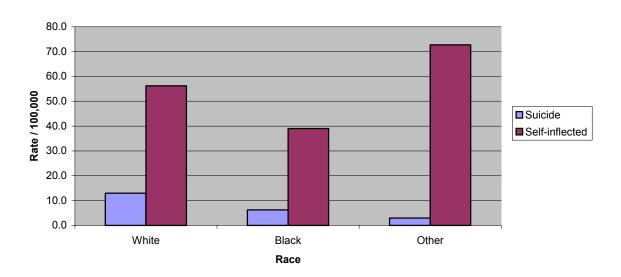


Figure 89: Average Hospital Charges for Self-inflicted Injuries, Virginia 2000

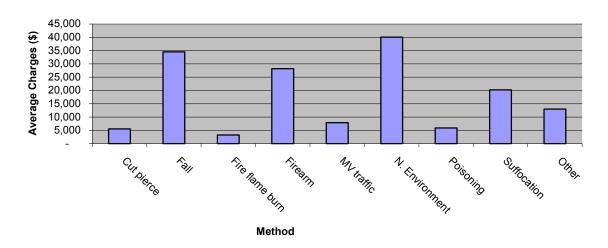
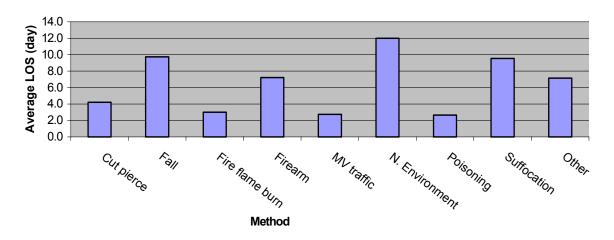


Figure 90: Average LOS in Hospitals due to Self-inflicted Injuries, Virginia 2000



VII. DRAFT LISTING OF DETAILED E-CODED GROUPINGS

Introduction

Since 1999, mortality data has been coded using the International Classification of Disease-10th Revision (ICD-10). Mechanism and cause of injury are based on ICD-10 external cause of injury codes. These codes are no longer considered supplemental codes as they were in ICD-9, and they are no longer referred to as "E-codes." The external cause of injury codes have been incorporated into the ICD-10 alphanumerica classification system as Chapter 20. ICD-10 external cause of injury codes begin with the letter V, W, X, or Y followed by a two-digit whole number (e.g., W25). Some external cause of injury codes also have a decimal followed by another number (e.g., V30.4).

Be aware that ICD-10 is a completely different coding system than ICD-9. Causes (mechanism) of injury categories defined using ICD-9 E-codes for deaths in 1981 through 1998 are different from those defined by ICD-10 external cause of injury codes for deaths in 1999. ICD-10 has many changes from ICD-9, including considerably greater detail and changes in terms and titles.

The codes in this chapter are taken from:

ICD-9 (www.eicd.com/isd-9-cm)
ICD-10 (www.cdc.gov/nchs)

Injury Hospitalizations (Non-fatal) ICD-9

RAILWAY ACCIDENTS (E800-E807)

- E800: Railway accident involving collision with rolling stock
- E801: Railway accident involving collision with other object
- E802: Railway accident involving derailment without antecedent collision
- E803: Railway accident involving explosion, fire, or burning
- E804: Fall in, on, or from railway train
- E805: Hit by rolling stock
- E806: Other specified railway accident
- E807: Railway accident of unspecified nature

MOTOR VEHICLE TRAFFIC ACCIDENTS (E810-E819)

- E810: Motor vehicle traffic accident involving collision with train
- E811: Motor vehicle traffic accident involving re-entrant collision with another motor vehicle
- E812: Other motor vehicle traffic accident involving collision with motor vehicle
- E813: Motor vehicle traffic accident involving collision with other vehicle
- E814: Motor vehicle traffic accident involving collision with pedestrian
- E815: Other motor vehicle traffic accident involving collision on the highway
- E816: Motor vehicle traffic accident due to loss of control, without collision on the highway
- E817: Noncollision motor vehicle traffic accident while boarding or alighting
- E818: Other noncollision motor vehicle traffic accident
- E819: Motor vehicle traffic accident of unspecified nature

MOTOR VEHICLE NONTRAFFIC ACCIDENTS (E820-E825)

- E820: Non-traffic accident involving motor-driven snow vehicle
- E821: Non-traffic accident involving other off-road motor vehicle
- E822: Other motor vehicle nontraffic accident involving collision with moving object
- E823: Other motor vehicle nontraffic accident involving collision with stationary object
- E824: Other motor vehicle nontraffic accident while boarding and alighting
- E825: Other motor vehicle nontraffic accident of other and unspecified nature
- E847: Accidents involving cable cars not running on rails
- E848: Accidents involving other vehicles, not elsewhere classifiable
- E869: Accidental poisoning by other gases and vapors
- E888: Other and unspecified fall
- E890: Conflagration in private dwelling

OTHER ROAD VEHICLE ACCIDENTS (E826-E829)

- E826: Pedal cycle accident
- E827: Animal-drawn vehicle accident
- E828: Accident involving animal being ridden
- E829: Other road vehicle accidents

WATER TRANSPORTATION ACCIDENTS (E830-E838)

- E830: Accident to watercraft causing submersion
- E831: Accident to watercraft causing other injury
- E832: Other accidental submersion or drowning in water transport accident
- E833: Fall on stairs or ladders in water transport
- E834: Other fall from one level to another in water transport
- E835: Other and unspecified fall in water transport

- E836: Machinery accident in water transport
- E837: Explosion, fire, or burning in watercraft
- E838: Other and unspecified water transport accident

AIR AND SPACE TRANSPORT ACCIDENTS (E840-E845)

- E840: Accident to powered aircraft at takeoff or landing
- E841: Accident to powered aircraft, other and unspecified
- E842: Accident to unpowered aircraft
- E843: Fall in, on, or from aircraft
- E844: Other specified air transport accidents
- E845: Accident involving spacecraft

VEHICLE ACCIDENTS NOT ELSWHERE CLASSIFIED (E845-E848)

E846: Accidents involving powered vehicles used solely within the buildings and premises of industrial or commercial establishment

PLACE OF ACCIDENT OCCURRENCE (E849)

E849: Place of occurrence

ACCIDENTAL POISONING BY DRUGS, MEDICINAL SUBSTANCES AND BIOLOGICALS (E850-E858)

- E850: Accidental poisoning by analgesics, antipyretics, and anti-rheumatics
- E851: Accidental poisoning by barbiturates
- E852: Accidental poisoning by other sedatives and hypnotics
- E853: Accidental poisoning by tranquilizers
- E854: Accidental poisoning by other psychotropic agents
- E855: Accidental poisoning by other drugs acting on central and autonomic nervous system
- E856: Accidental poisoning by antibiotics
- E857: Accidental poisoning by other anti-infectives
- E858: Accidental poisoning by other drugs

ACCIDENTAL POISONING BY OTHER SOLID AND LIQUID SUBSTANCES, GASES AND VAPORS (E860-E869)

- E860: Accidental poisoning by alcohol not elsewhere classified
- E861: Accidental poisoning by cleansing and polishing agents, disinfectants, paints and varnishes
- E862: Accidental poisoning by petroleum products, other solvents and their vapors, not elsewhere clarified
- E863: Accidental poisoning by agricultural and horticultural chemical and pharmaceutical preparations other than plant foods and fertilizers
- E864: Accidental poisoning by corrosives and caustics, not elsewhere classified
- E865: Accidental poisoning from poisonous foodstuffs and poisonous plants
- E866: Accidental poisoning by other and unspecified solid and liquid substances
- E867: Accidental poisoning by gas distributed by pipeline
- E868: Accidental poisoning by other utility gas and other carbon monoxide

MISADVENTURES TO PATIENTS DURING SURGICAL AND MEDICAL CARE (E870-E876)

- E870: Accidental cut, puncture, perforation, or hemorrhage during medical care
- E871: Foreign object left in body during procedure
- E872: Failure of sterile precautions during procedure
- E873: Failure in dosage
- E874: Mechanical failure of instrument or apparatus during procedure
- E875: Contaminated or infected blood, other fluid, drug, or biological substance
- E876: Other and unspecified misadventures during medical care

AT THE TIME OF THE PROCEDURE (E878-E879)

SURGICAL AND MEDICAL PROCEDURES AS THE CAUSE OF ABNORMAL REACTION OF PATIENT OR LATER COMPLICATION, WITHOUT MENTION OF MISADVENTURE

- E878: Surgical operation and other surgical procedures as the cause of abnormal reaction of patient, or of later complication, without mention of misadventure at the time of operation
- E879: Other procedures, without mention of misadventure at the time of Procedure, as the cause of abnormal reaction of patient, or of later complication

ACCIDENTAL FALLS (E880-E888)

- E880: Fall on or from stairs or steps
- E881: Fall on or from ladders or scaffolding
- E882: Fall from or out of building or other structure
- E883: Fall into hole or other opening in surface
- E884: Other fall from one level to another
- E885: Fall on same level from slipping, tripping, or stumbling
- E886: In sports
- E887: Fracture, cause unspecified

ACCIDENTS CAUSED BY FIRE AND FLAMES (E890-E899)

- E891: Conflagration in other and unspecified building or structure
- E892: Conflagration not in building or structure
- E893: Accident caused by ignition of clothing
- E894: Ignition of highly inflammable material
- E895: Accident caused by controlled fire in private dwelling
- E896: Accident caused by controlled fire in other and unspecified building or Structure
- E897: Accident caused by controlled fire not in building or structure
- E898: Accident caused by other specified fire and flames
- E899: Accident caused by unspecified fire

ACCIDENTS DUE TO NATURAL AND ENVIRONMENTAL FACTORS (E900-E909)

- E900: Excessive heat
- E901: Excessive cold
- E902: High and low air pressure and changes in air pressure
- E903: Travel and motion
- E904: Hunger, thirst, exposure, and neglect
- E905: Venomous animals and plants as the cause of poisoning and toxic Reactions
- E906: Other injury caused by animals
- E907: Lightning
- E908: Cataclysmic storms, and floods resulting from storms
- E909: Cataclysmic earth surface movements and eruptions

ACCIDENTS CAUSED BY SUBMESION, SUFFOCATION AND FOREIGN BODIES (E910-E915)

- E910: Accidental drowning and submersion
- E911: Inhalation and ingestion of food causing obstruction of respiratory tract or suffocation
- E912: Inhalation and ingestion of other object causing obstruction of respiratory tract or suffocation
- E913: Accidental mechanical suffocation
- E914: Foreign body accidentally entering eye and adnexa
- E915: Foreign body accidentally entering other orifice

OTHER ACCIDENTS (E916-E928)

- E916: Struck accidentally by falling object
- E917: Striking against or struck accidentally by objects or persons
- E918: Caught accidentally in or between objects
- E919: Accidents caused by machinery
- E920: Accidents caused by cutting and piercing instruments or objects
- E921: Accident caused by explosion of pressure vessel
- E922: Accident caused by firearm and air gun missile
- E923: Accident caused by explosive material
- E924: Accident caused by hot substance or object, caustic or corrosive material and steam
- E925: Accident caused by electric current
- E926: Exposure to radiation
- E927: Overexertion and strenuous movements
- E928: Other and unspecified environmental and accidental causes

ACCIDENTS CAUSED BY SUBMESION, SUFFOCATION AND FOREIGN BODIES (E910-E915)

- E910: Accidental drowning and submersion
- E911: Inhalation and ingestion of food causing obstruction of respiratory tract or suffocation
- E912: Inhalation and ingestion of other object causing obstruction of respiratory tract or suffocation
- E913: Accidental mechanical suffocation
- E914: Foreign body accidentally entering eye and adnexa
- E915: Foreign body accidentally entering other orifice

OTHER ACCIDENTS (E916-E928)

- E916: Struck accidentally by falling object
- E917: Striking against or struck accidentally by objects or persons
- E918: Caught accidentally in or between objects
- E919: Accidents caused by machinery
- E920: Accidents caused by cutting and piercing instruments or objects
- E921: Accident caused by explosion of pressure vessel
- E922: Accident caused by firearm and air gun missile
- E923: Accident caused by explosive material
- E924: Accident caused by hot substance or object, caustic or corrosive material and steam
- E925: Accident caused by electric current
- E926: Exposure to radiation
- E927: Overexertion and strenuous movements
- E928: Other and unspecified environmental and accidental causes

LATE EFFECTS OF ACCIDENTAL INJURY (E929)

E929: Late effects of accidental injury

DRUGS MEDICINAL BIOLOGICAL SUBSTANCES CAUSEING ADVERSE EFFECTS IN THRAPEUTIC USE (E930-E949)

- E930: Antibiotics
- E931: Other anti-infectives
- E932: Hormones and synthetic substitutes
- E933: Primarily systemic agents
- E934: Agents primarily affecting blood constituents
- E935: Analgesics, antipyretics, and antirheumatics
- E936: Anticonvulsant and anti-Parkinsonism drugs
- E937: Sedatives and hypnotics
- E938: Other central nervous system depressants and anesthetics

- E939: Psychotropic agents
- E940: Central nervous system stimulants
- E941: Drugs primarily affecting the autonomic nervous system
- E942: Agents primarily affecting the cardiovascular system
- E943: Agents primarily affecting gastrointestinal system
- E944: Water, mineral, and uric acid metabolism drugs
- E945: Agents primarily acting on the smooth and skeletal muscles and respiratory system
- E946: Agents primarily affecting skin and mucous membrane, ophthalmological, otorhinolaryngological, and dental drugs
- E947: Other and unspecified drugs and medicinal substances
- E948: Bacterial vaccines
- E949: Other vaccines and biological substances

SUICIDE AND SEF-INFLECTED INJURY (E950-E959)

- E950: Suicide and self-inflicted poisoning by solid or liquid substances
- E951: Suicide and self-inflicted poisoning by gases in domestic use
- E952: Suicide and self-inflicted poisoning by other gases and vapors
- E953: Suicide and self-inflicted injury by hanging, strangulation, and suffocation
- E954: Suicide and self-inflicted injury by submersion [drowning]
- E955: Suicide and self-inflicted injury by firearms, air guns and explosives
- E956: Suicide and self-inflicted injury by cutting and piercing instrument
- E957: Suicide and self-inflicted injuries by jumping from high place
- E958: Suicide and self-inflicted injury by other and unspecified means
- E959: Late effects of self-inflicted injury

HOMICIDE AND INJURY PURPOSELY INFLECTED BY OTHER PERSONS (E960-E969)

- E960: Fight, brawl, and rape
- E961: Assault by corrosive or caustic substance, except poisoning
- E962: Assault by poisoning
- E963: Assault by hanging and strangulation
- E964: Assault by submersion [drowning]
- E965: Assault by firearms and explosives
- E966: Assault by cutting and piercing instrument
- E967: Perpetrator of child and adult abuse
- E968: Assault by other and unspecified means
- E969: Late effects of injury purposely inflicted by other person

LEGAL INTERVENTION (E970-E978)

- E970: Injury due to legal intervention by firearms
- E971: Injury due to legal intervention by explosives
- E972: Injury due to legal intervention by gas
- E973: Injury due to legal intervention by blunt object
- E974: Injury due to legal intervention by cutting and piercing instrument
- E975: Injury due to legal intervention by other specified means
- E976: Injury due to legal intervention by unspecified means
- E977: Late effects of injuries due to legal intervention
- E978: Legal execution

INJURY UNDETRMINED WHETHER ACCIDENTALLY OR PURPOSELY INFLECTED (E980-E989)

- E980: Poisoning by solid or liquid substances, undetermined whether accidentally or purposely inflicted
- E981: Poisoning by gases in domestic use, undetermined whether accidentally or purposely inflicted
- E982: Poisoning by other gases, undetermined whether accidentally or purposely inflicted

- E983: Hanging, strangulation, or suffocation, undetermined whether accidentally or purposely inflicted
- E984: Submersion [drowning], undetermined whether accidentally or purposely inflicted
- E985: Injury by firearms, air guns and explosives, undetermined whether accidentally or purposely inflicted
- E986: Injury by cutting and piercing instruments, undetermined whether accidentally or purposely inflicted
- E987: Falling from high place, undetermined whether accidentally or purposely inflicted
- E988: Injury by other and unspecified means, undetermined whether accidentally or purposely inflicted
- E989: Late effects of injury, undetermined whether accidentally or purposely inflicted

INJURY RESULTING FROM OPERATIONS OF WAR (E990-E999)

- E990: Injury due to war operations by fires and conflagrations
- E991: Injury due to war operations by bullets and fragments
- E992: Injury due to war operations by explosion of marine weapons
- E993: Injury due to war operations by other explosion
- E994: Injury due to war operations by destruction of aircraft
- E995: Injury due to war operations by other and unspecified forms of conventional warfare
- E996: Injury due to war operations by nuclear weapons
- E997: Injury due to war operations by other forms of unconventional warfare
- E998: Injury due to war operations but occurring after cessation of hostilities
- E999: Late effect of injury due to war operations

Injury Deaths (Fatal) ICD-10

Cut/pierce

Unintentional: W25-W29, W45

Suicide: X78 Homicide: X99 Undetermined: Y28 Legal intervention: Y35.4

Drowning

Unintentional: W65-W74

Suicide: X71 Homicide: X92 Undetermined: Y21

Fall

Unintentional: W00-W19

Suicide: X80 Homicide: Y01 Undetermined: Y30

Fire/ hot object or substance

Unintentional: X00-X19 Suicide: X76-X77 Homicide: X97-X98 Undetermined: Y26-Y27 Legal intervention: Y36.3

Fire/flame

Unintentional: X00-X09

Suicide: X76 Homicide: X97 Undetermined: Y26 **Hot object/substance** Unintentional: X10-X19

Suicide: X77 Homicide: X98 Undetermined: Y27

Firearm

Unintentional: W32-W34

Suicide: X72-X74 Homicide: X93-X95 Undetermined: Y22-Y24 Legal intervention: Y35.0

Machinery

Unintentional: W24, W30-W31

All Transport

Unintentional: V01-V99

Suicide: X82 Homicide: Y03 Undetermined: Y32 Legal intervention: Y36.1

Motor Vehicle Traffic (all unintentional)

Occupant

V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9)

V60-V69 (.4-.9), V70-V79 (.4-.9), V81.1 V82.1, V83-V86 (.0-.3)

Motorcyclist

V20-V28 (.3-.9), V29 (.4-.9)

Pedal cyclist

V12-V14 (.3-.9), V19 (.4-.6)

Pedestrian

V02-V04 (.1, .9) V09.2

Other

V80 (.3-.5)

Unspecified

V87 (.0-.8), V89.2

Pedal cyclist, other

V10-V11, V12-V14 (.0-.2), V15-V18, V19 (.0-.3, .8, .9)

Pedestrian, other

V01, V02-V04 (.0), V05, V06, V09 (.0,.1,.3,.9)

Other land transport

V20-V28 (.0-.2), V29 (.0-.3), V30-V39 (.0-.3), V40-V49 (.0-.3),

V50-V59 (.0-.3), V60-V69 (.0-.3), V70-V79 (.0-.3), V80 (.0-.2, .6-.9)

V81-V82 (.0,.2-.9), V83-V86 (.4-.9), V87.9, V88 (.0-.9),

V89 (.0, .1 .3,.9)

Other Transport

V90-V99

Natural /environmental

W42, W43, W53-W64, W92-W99, X20-X39, X51-X57

Overexertion

X50

Poisoning

Unintentional: X40-X49

Suicide: X60-X69 Homicide: X85-X90 Undetermined: Y10-Y19 Legal intervention: Y35.2

Struck by or against

Unintentional: W20-W22, W50-W52

Suicide: X79

Homicide: Y00, Y04 Undetermined: Y29 Legal intervention: Y35.3

Suffocation

Unintentional: W75-W84

Suicide: X70 Homicide: X91 Undetermined: Y20

Other specified, classifiable

Unintentional: W23, W35-W41, W44, W49, W85-W91, Y85

Suicide: X75, X81

Homicide: X96, Y02, Y05-Y07

Undetermined: Y25, Y31

Legal intervention: Y35(.1, .5) Y36 (.0, .2,.4-.8)

Other specified

Unintentional: X58, Y86 Suicide: X83, Y87.0 Homicide: Y08, Y87.1 Undetermined: Y33, Y87.2

Legal intervention: Y35.6, Y89 (.0, .1)

Unspecified

Unintentional: X59

Suicide: X84 Homicide: Y09

Undetermined: Y34, Y89.9 Legal intervention: Y35.7, Y36.9

Adverse effects

Drugs: Y40-Y59, Y88.0

Medical care: Y60-Y84, Y88 (.1-.3)

VIII. CONCLUSIONS

This report summarizes injury-related hospitalizations and deaths in Virginia for the year 2000. The report identifies our major injury risk areas, which population are involved and the cost of the injuries.

It is important to remember that this report is based only on fatal injuries and non-fatal injuries that were admitted or discharged from hospitals in 2000 and, therefore reflects only a small portion of the injury experienced in Virginia.

We hope that this report will help Virginians to better understand that injury is a major public health problem and to recognize the importance of injury prevention. Injuries do not merely occur by chance or carelessness, rather injuries are preventable events that can be reduced through education, behavioral changes, environmental modifications and the use of safety devices.

Center for Injury & Violence Prevention



www.vdh.state.va.us www.vahealth.org/civp